Digital Micro-measure Camera

User Manual

Digital Micro-measure camera is a slim type handy tool.

It can easily use in different fields:

1. Skin inspection
2. Hair inspection
3. Industrial inspection: PCB, Material…
4. Education purpose
5. Print Industrial
6. Textile industrial
7. Biological inspection
8. Jewel & Stamp (Collections) inspection
9. Others

Digital micro-measure camera is designe for PC solution with friendly user interface. The special AP software:

Micro-Measure-Tool can support you to have picture, record video and do micro-measure work with ease.

CONTENTS

Specification.....2

Notes before use.....2

Outlook & Standard parts.....3

Hardware system requirements.....3

Driver Free Mode 4

Driver Enhanced Mode 5

How to use Digital Micro-measure Camera.....9

How to install software.....19

How to do micro-measure.....22

Q & A.....31

Specification

Image Sensor	Color CMOS Sensor
Controller	High Speed DSP(Driver Free available)
Lens	Micro-Scope Lens , M12
Focus Range	0mm ~ 200mm
Snap Shot	Software and Hardware
Video Capture Resolution	1600*1200,1280*1024, 800*600,640*480 352*288,320*240,176*144
Light Source	In-built White Light LED x8 PCS
Still Image Capture Resolution	5M, 3M , 2M , 1.3M , VGA
Frame Rate	30 f/s Under 600 LUX Brightness (1.3M)
Digital Zoom	4X Sequence Mode
Brightness Control	Manual adjustment , Auto W/B by software
Magnification Ratio	5 X ~ 500X (Manual)
Power Supply	USB Port (5V DC)
Interface	USB 2.0
Operation System	Win XP , Vista , Win 7 32 bit and 64 bit.
Driver Language	English, Chinese, German, Italy, French, Spain, Portugal, Japan
Measure Tool	Micro-Measure(It can measure Length and diameters, angle, the perimeter, area, etc) (Language: English, Chinese Simplified)
System Requirement	Pentium Computer with 1G Hz & Above , 1G HD Space CD ROM Driver, 512MB RAM , Direct X VGA Card
CD disk	Driver and Micro-Measure Tool
Fix Stand	All view angle available fix stand
Dimension	115 mm (L) X 33 mm (R)

Notes before use

1. Don’t touch lens & LED light area.
2. Don’t de-assembly the digital Micro-measure camera , it cause damage.
3. Don’t use it under high humidity environment.
4. Depart the USB port when un-use.
5. Clean out case with dry cloth.
6. Keep away from oil and floating materials, it causes lens contamination.
7. Avoid outdoor use if possible.
8. Storage: Temperature :O℃ ~ 40℃,Humidity:45% ~ 85%.
9. When this product get wet: leave PC connection immediately. And do not de-assembly or dry by hair dryer. Send to repair center.

Outlook & Standard parts

1. Digital Micro-measure Camera
2. USB 2.0 cable
3. Flexible Stand
4. CD ROM
5. User Guide

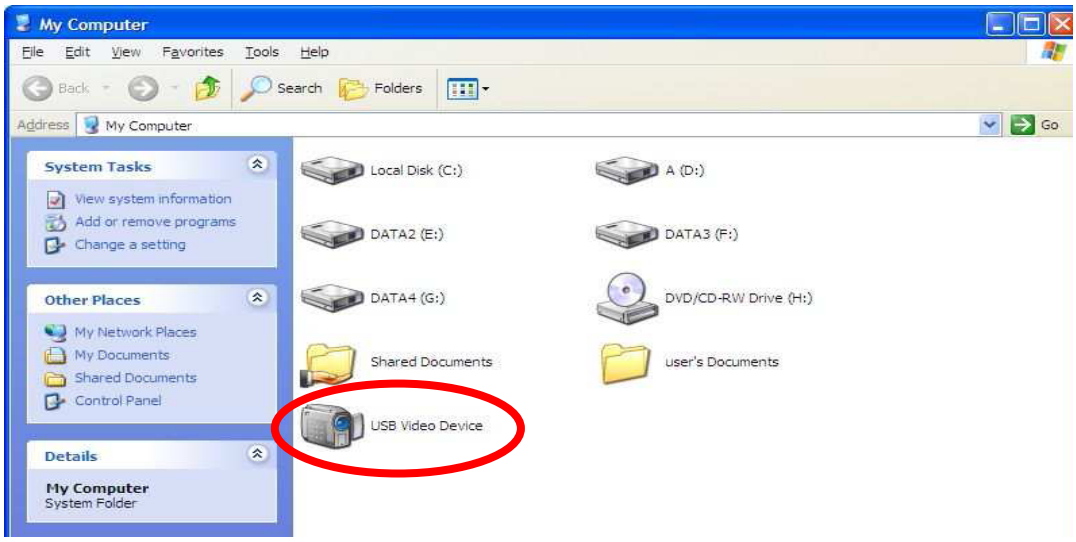
Hardware system requirements

- Windows XP、VISTA、WIN 7
- Pentium 1G, Celeron, AMD 1G & above
- 512MB Memory
- 1G Hard Disc memory space
- 16-bit & above VGA Card
- CD-ROM
- USB2.0 interface

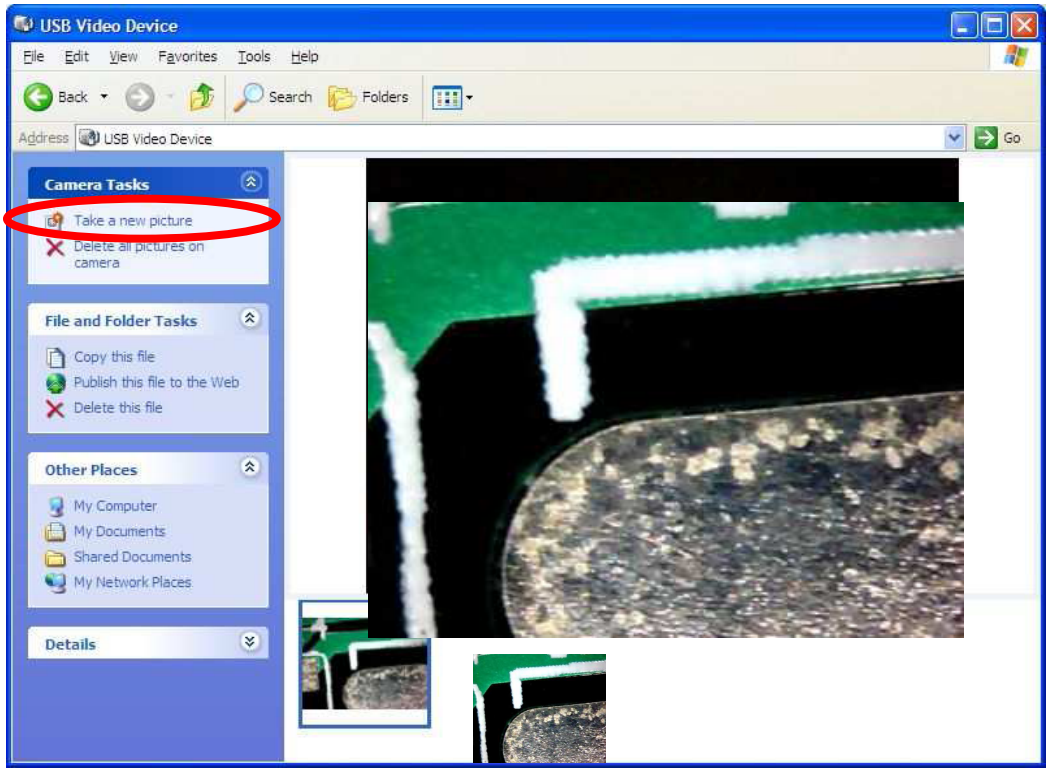
Driver Free Mode

NOTE :If your OS is VISTA or WIN 7 standard version, it is important for you to make sure the pre-view program "CamApp " is ready before run " Driver Free" function. We prepare it also inside our CD ROM , You can install the driver and get it ready before use.

1. Plug-in the USB port of Digital Micro-measure Camera into Computer USB port, Find USB Video Device in " My Computer ".



2. Take pictures

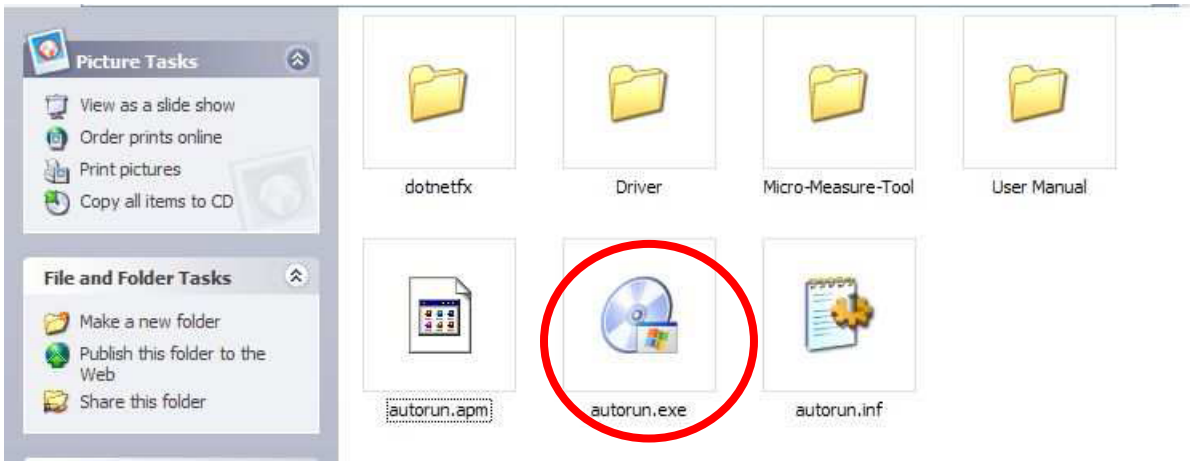


Driver Enhanced Mode

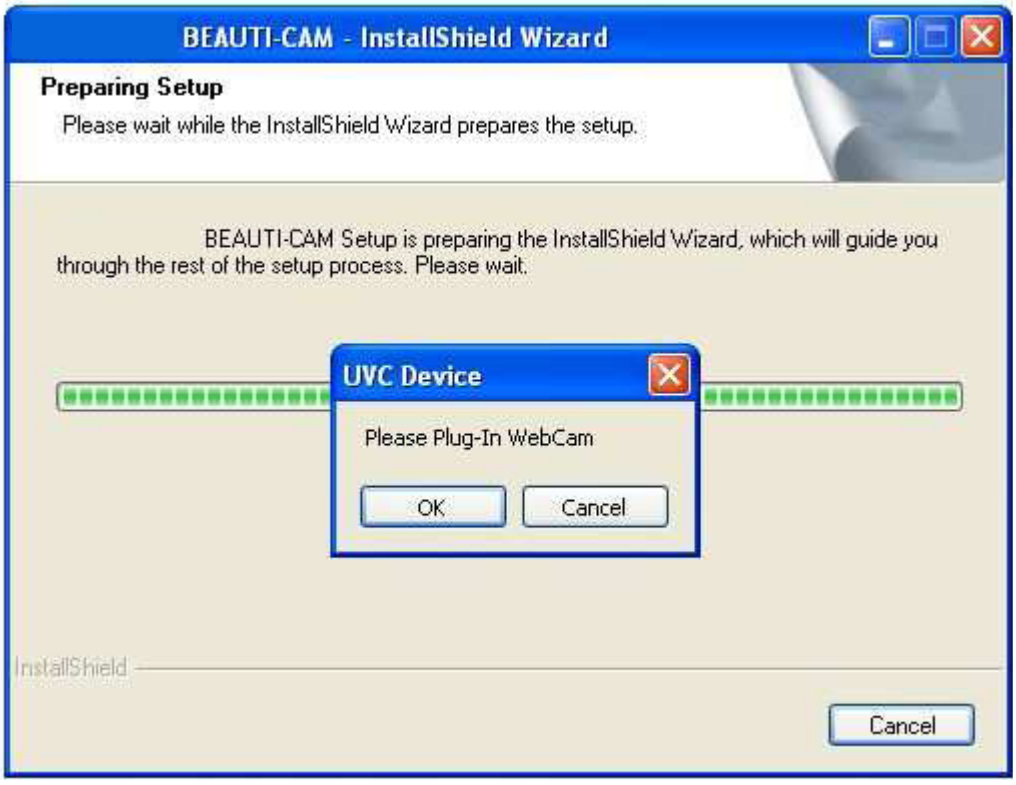
1. Plug-in USB port of Digital Micro-measure camera into Computer USB port

2. Insert CD ROM, system will auto come out the interface as bellowing, Click”Driver” to start installation

NOTE：If auto run takes times or unable : Please open the file of CD ROM & run“Autorun.exe”



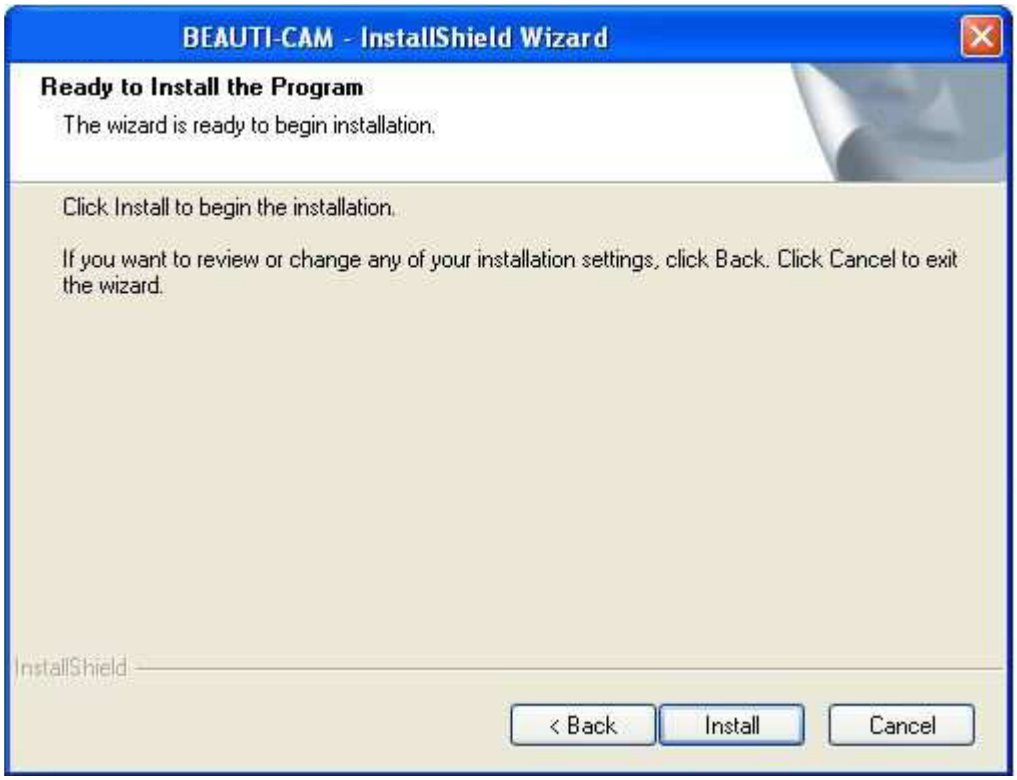
3. Follow the indicators and select “OK”

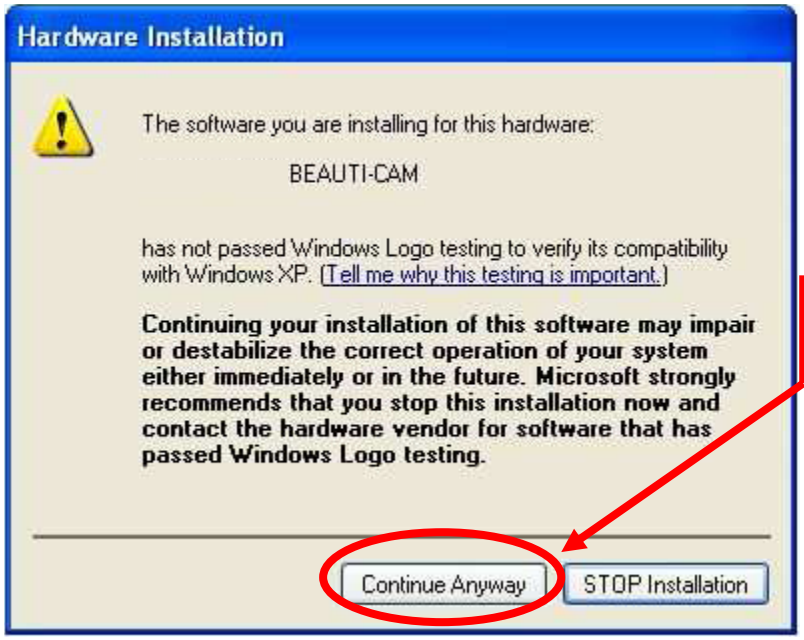

BEAUTI-CAM - InstallShield Wizard
Preparing Setup
Please wait while the InstallShield Wizard prepares the setup.
BEAUTI-CAM Setup is preparing the InstallShield Wizard, which will guide you through the rest of the setup process. Please wait.
UVC Device
Please Plug-In WebCam
OK
Cancel
InstallShield
Cancel

4.Select “next” to complete this process.

BEAUTI-CAM - InstallShield Wizard
Welcome to the InstallShield Wizard for BEAUTI-CAM
The InstallShield Wizard will install BEAUTI-CAM on your computer. To continue, click Next.
< Back
Next >
Cancel

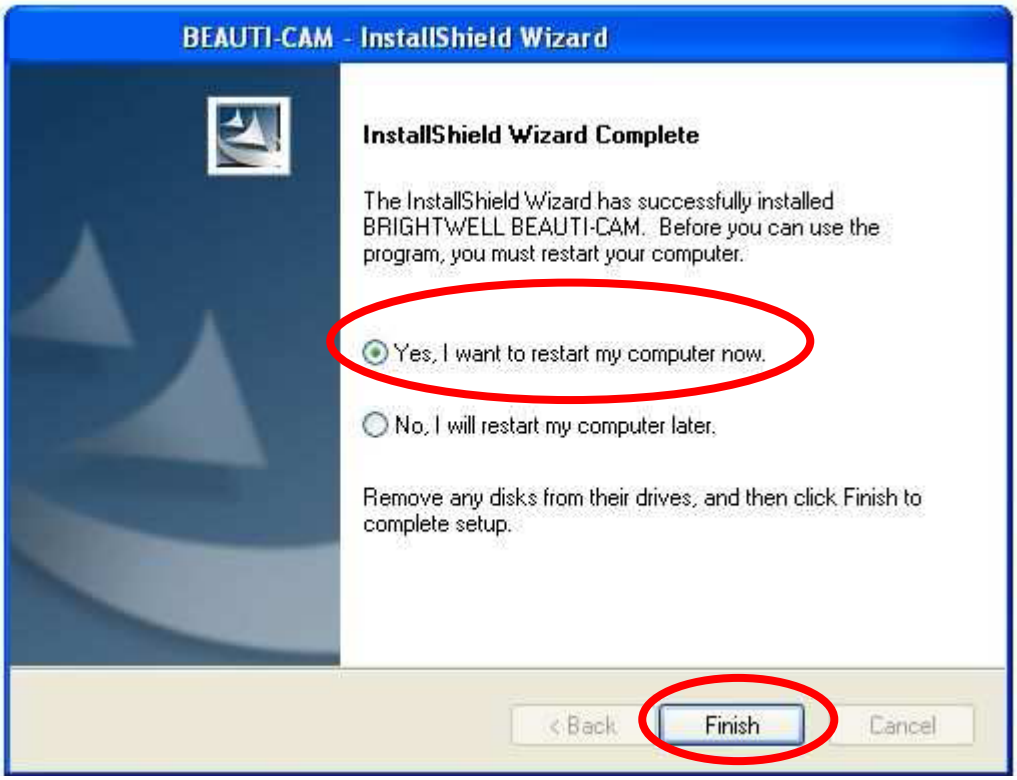
Select “install” to complete this process.


BEAUTI-CAM - InstallShield Wizard
Ready to Install the Program
The wizard is ready to begin installation.
Click Install to begin the installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
InstallShield
< Back
Install
Cancel


Hardware Installation
The software you are installing for this hardware:
BEAUTI-CAM
has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.)
Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
Continue Anyway
STOP Installation

Click ”Continue Anyway”

Following the user guide by steps, and completed by click “Finish“. Computer will restart and get ready .

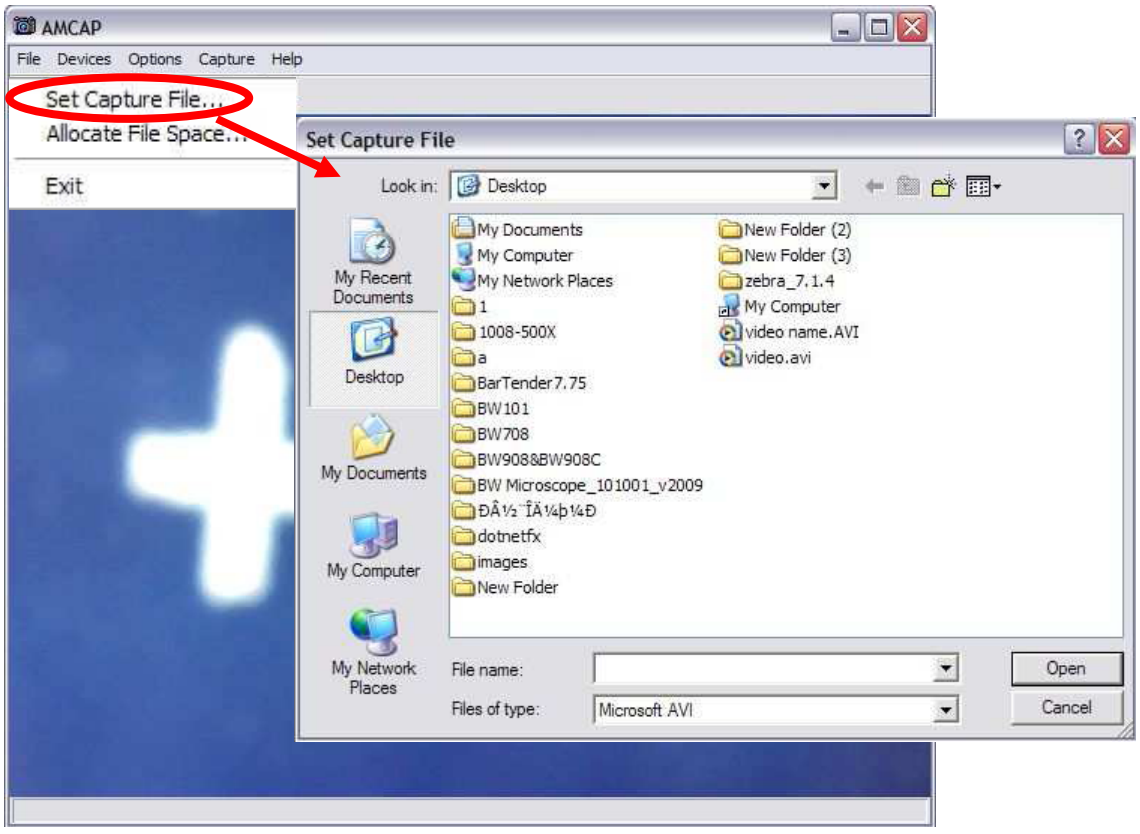

BEAUTI-CAM - InstallShield Wizard
InstallShield Wizard Complete
The InstallShield Wizard has successfully installed BRIGHTWELL BEAUTI-CAM. Before you can use the program, you must restart your computer.
Yes, I want to restart my computer now.
No, I will restart my computer later.
Remove any disks from their drives, and then click Finish to complete setup.
< Back
Finish
Cancel

How to use Digital Micro-measure Camera

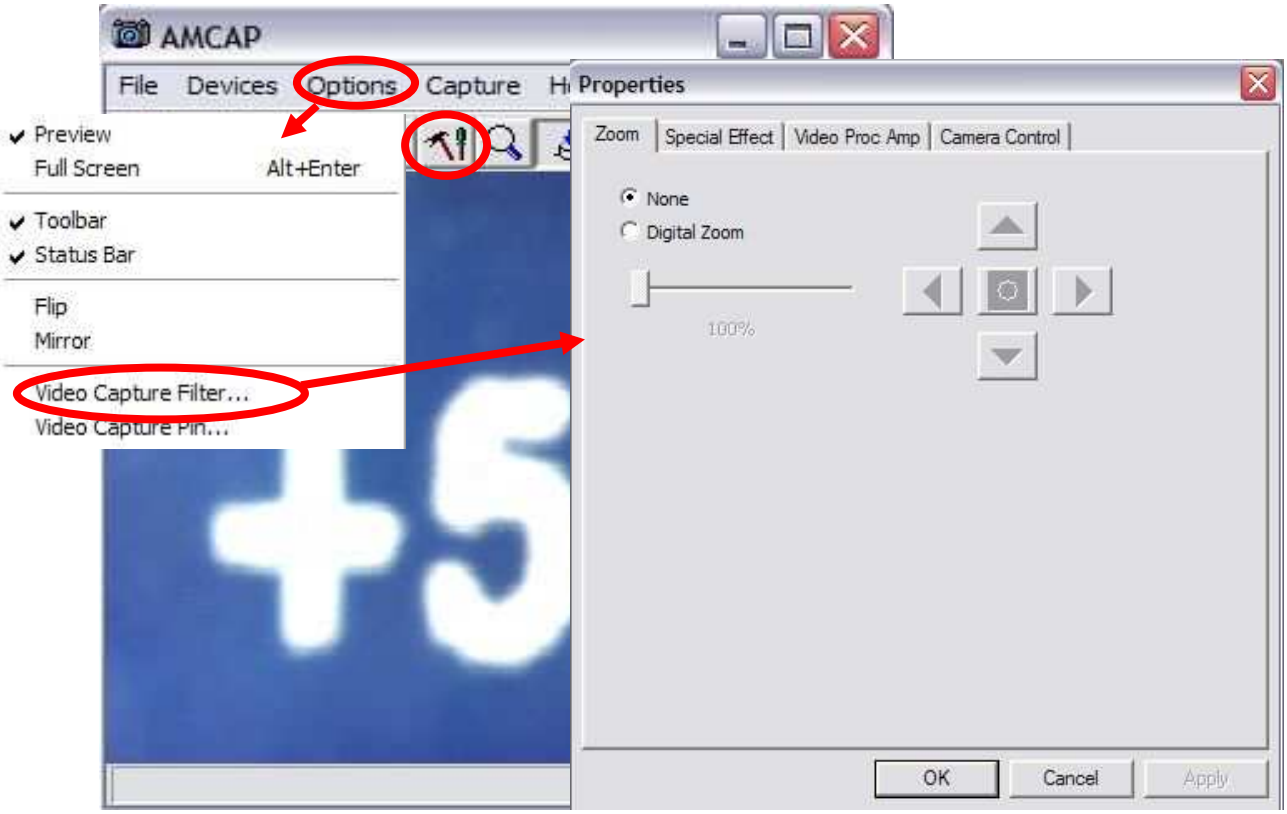
1. Plug-in USB port of Digital Micro-measure camera into Computer USB port，

Direct Click icon on desk top of computer to start this device.

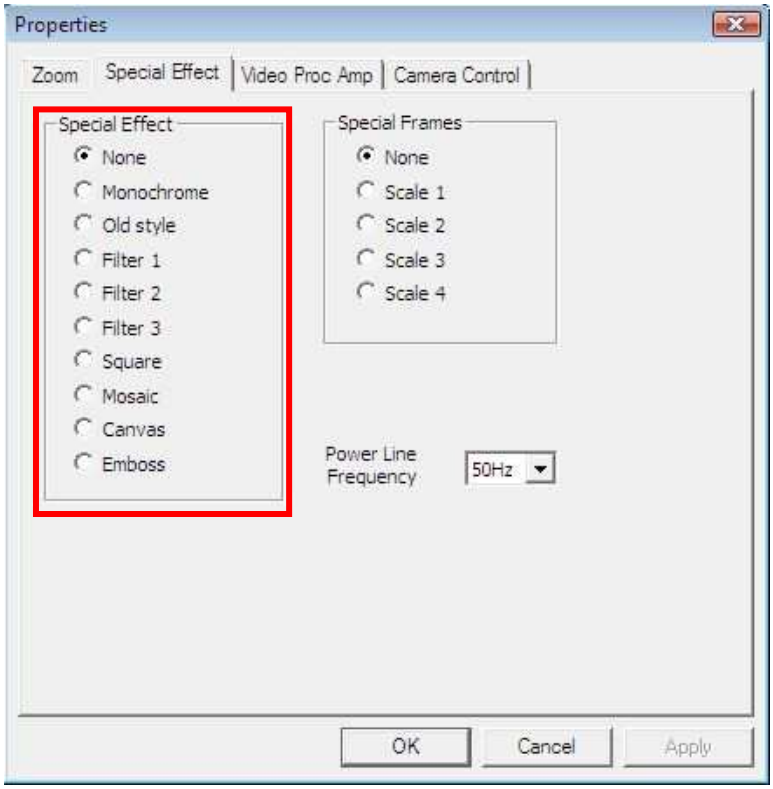
2. Click ”File”—> “Set capture file”, the saved file name could be assign.

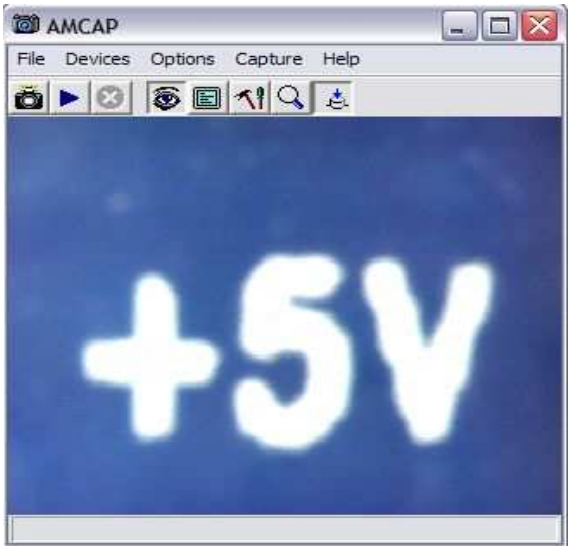


3. Get active the “ review” function under item of option . Click “Option”—>“Video Capture filter…” .Or Click icon . The Properties showed below：

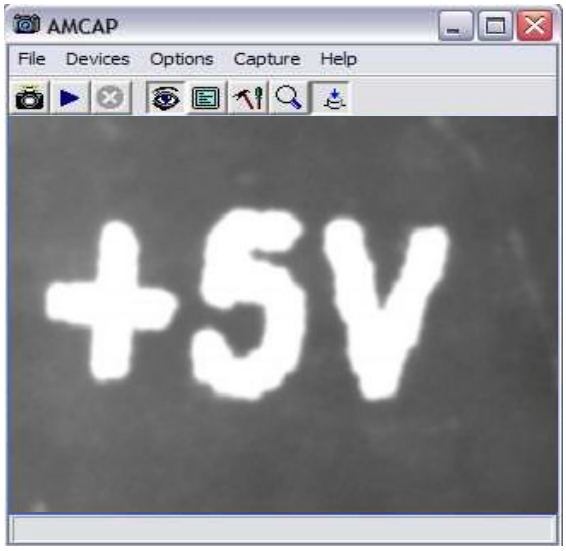


4.Get active the “Zoom”—>“ None” function under item of option. Click “Special Effect”

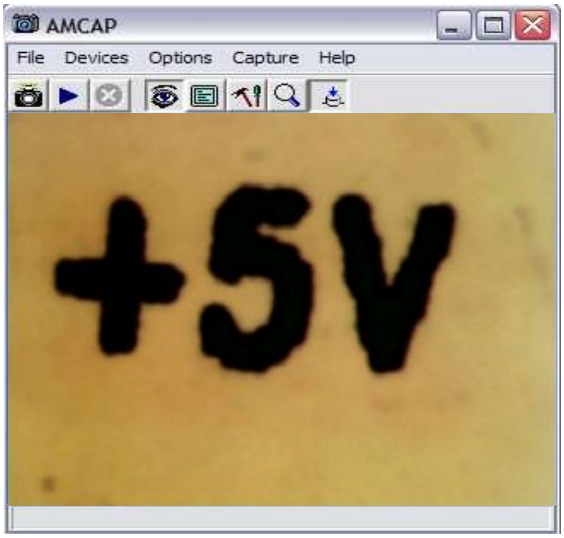




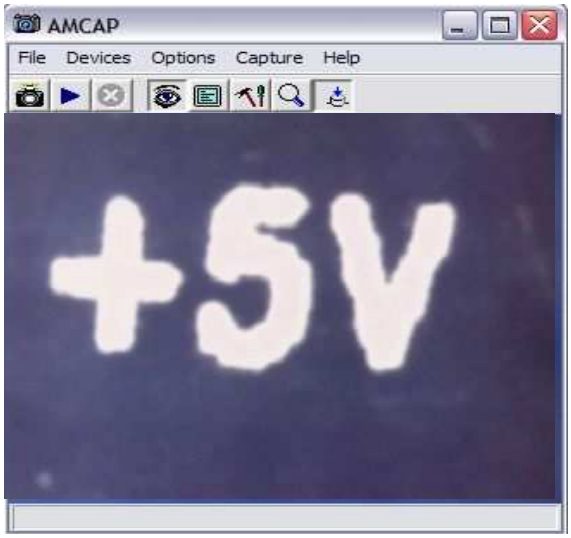
None(Original)



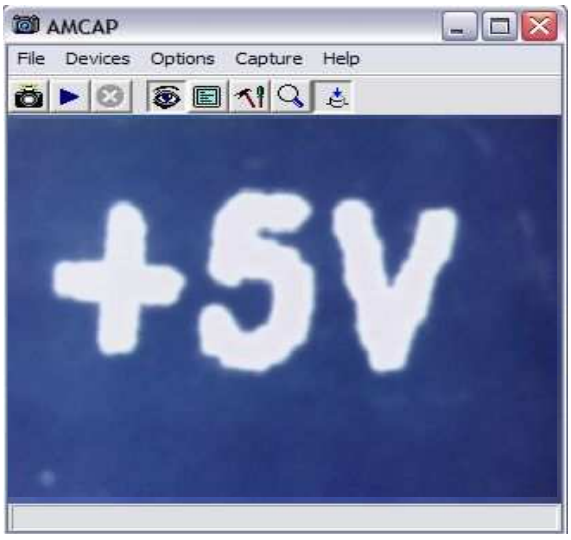
Monochrome



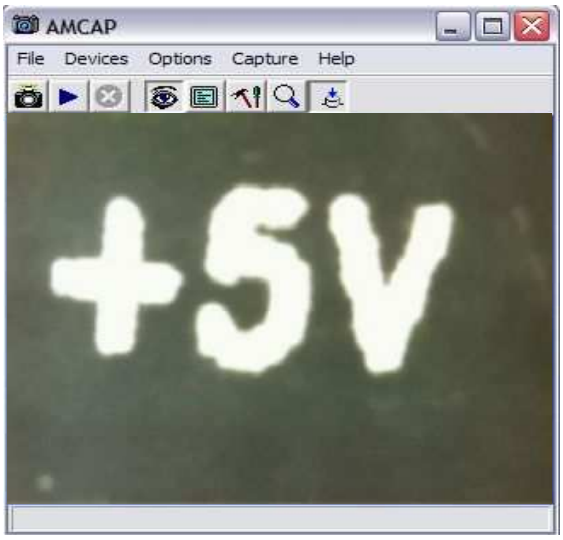
Old style



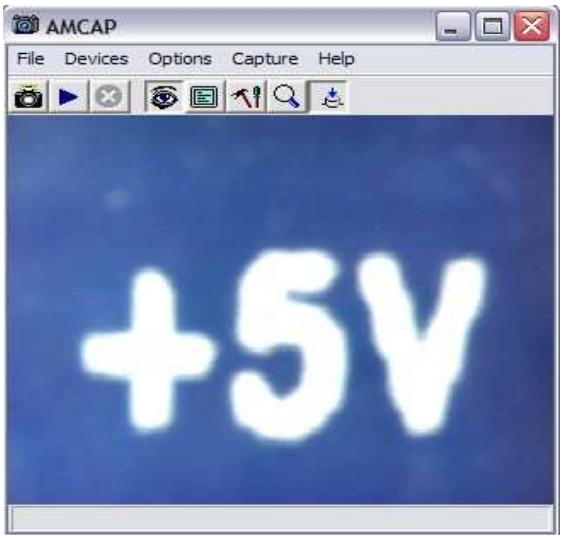
Filter1



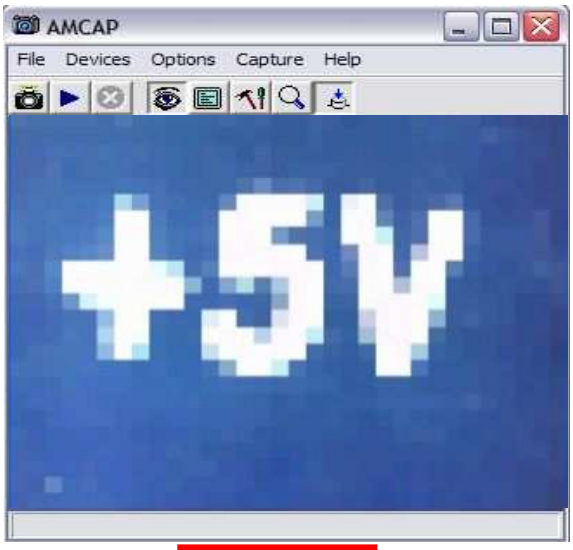
Filter2



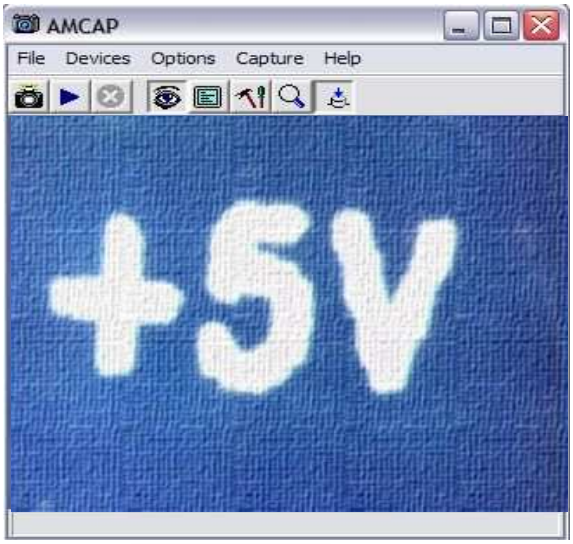
Filter3



Square



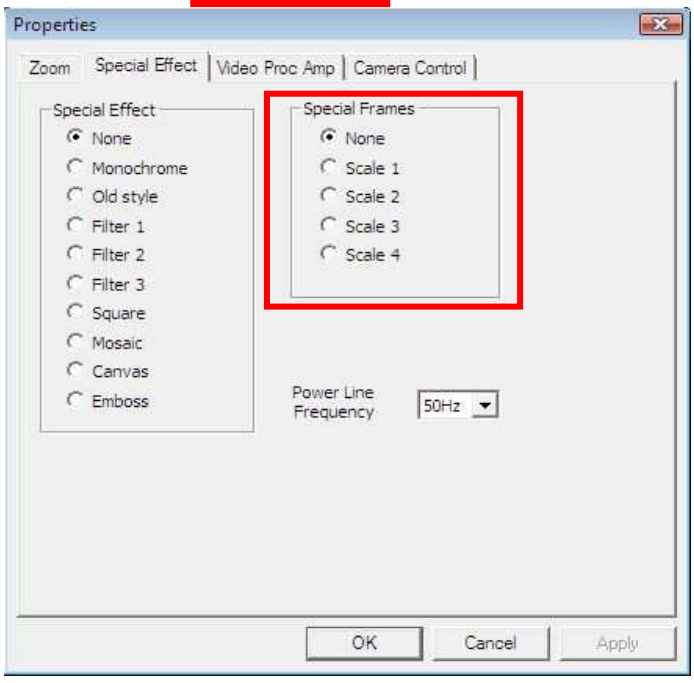
Mosaic



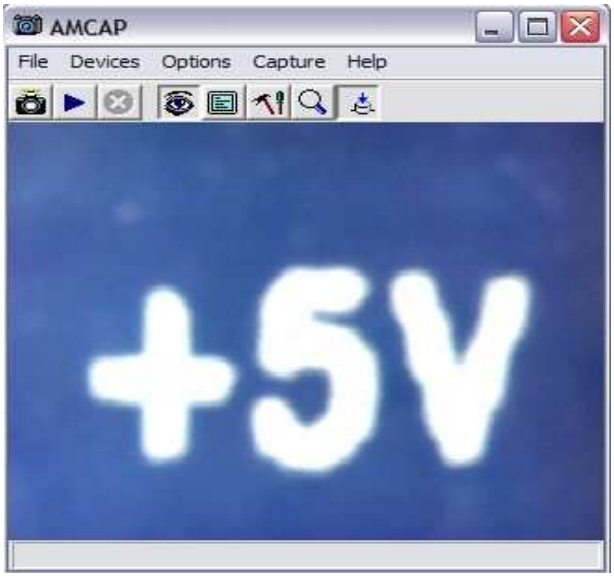
Canvas

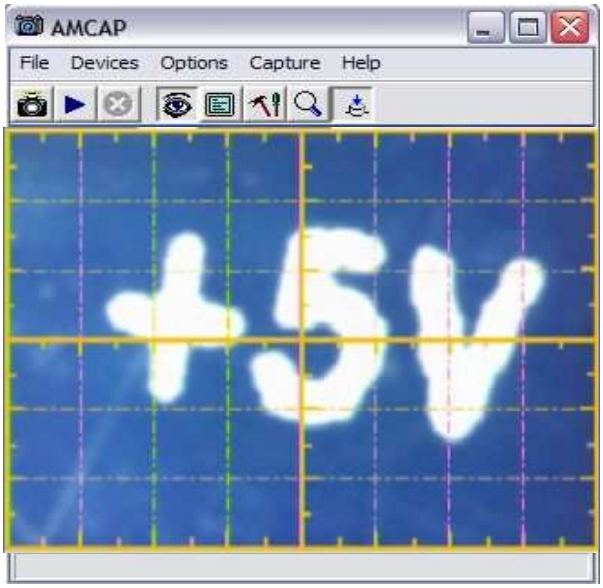
Embos

Click “Special Effect” “—> “Special Frames” —>”None”/”Scale1” /”Scale2” /”Scale3” /”Scale4” .

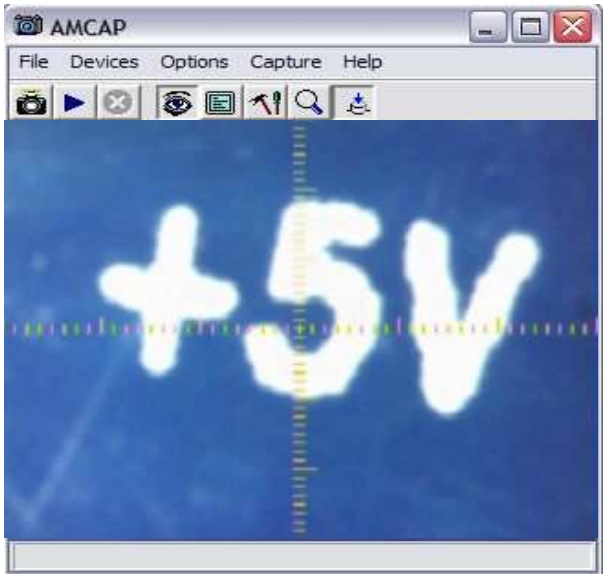


None(Original)

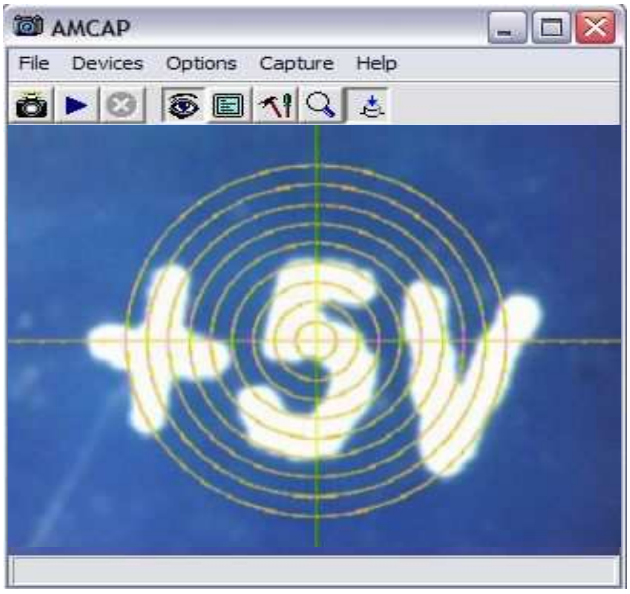




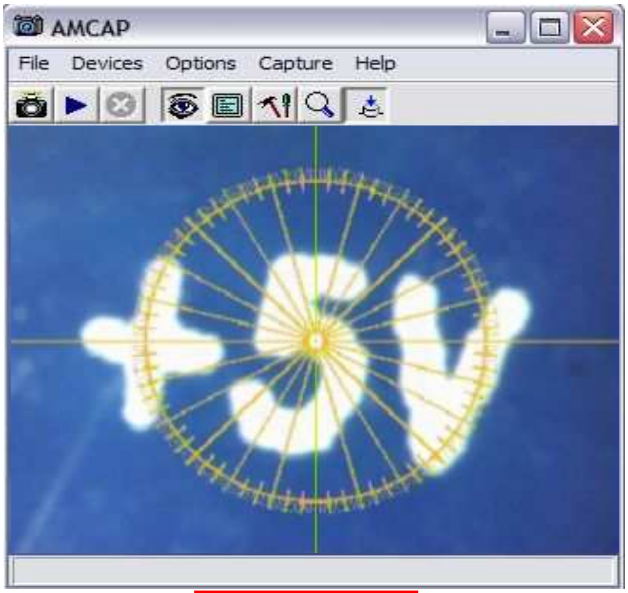
Scale1



Scale 2

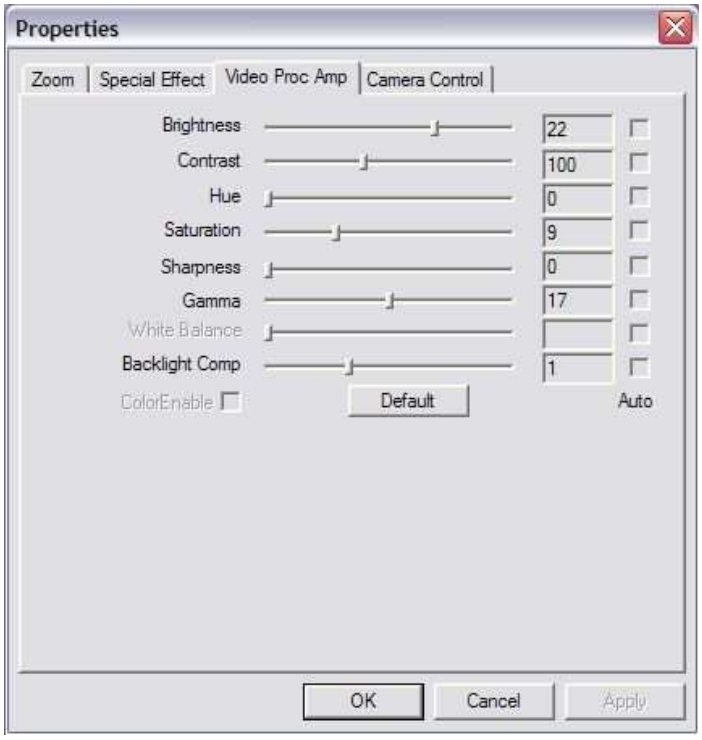


Scale 3

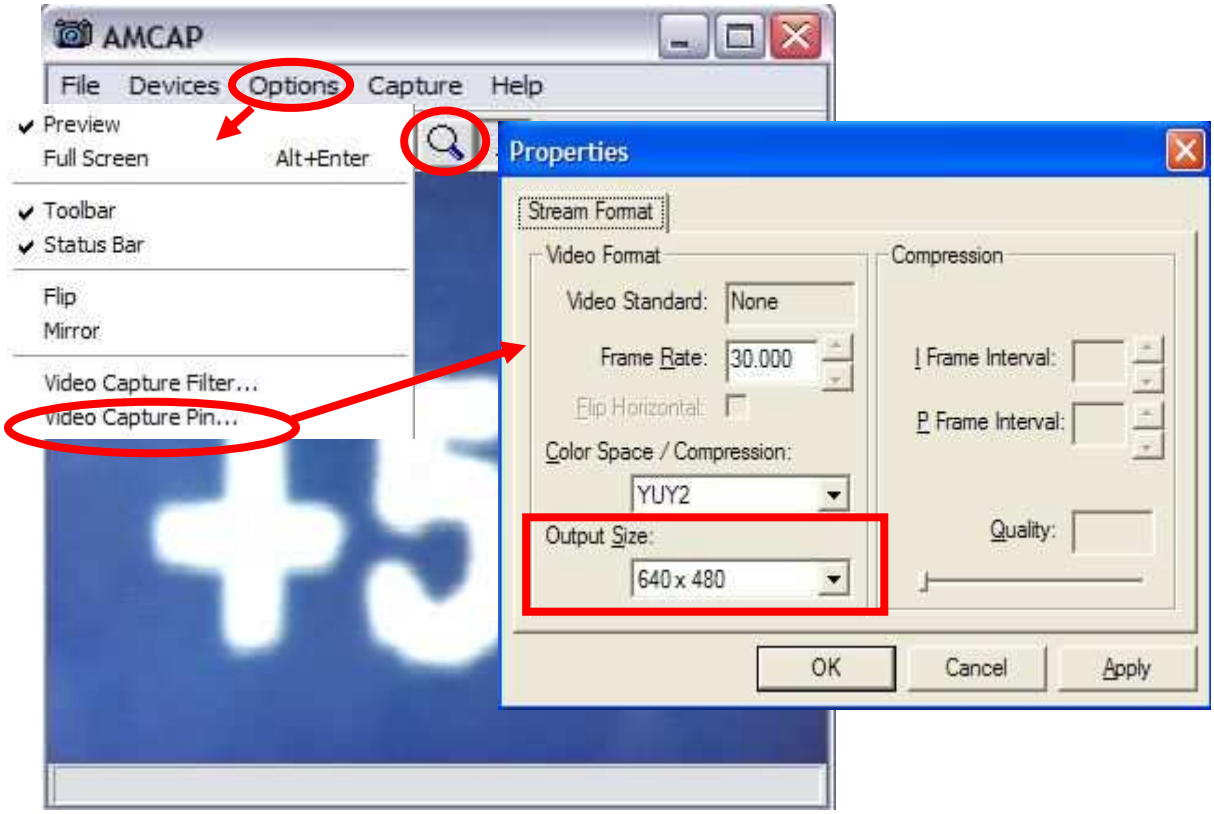


Scale 4

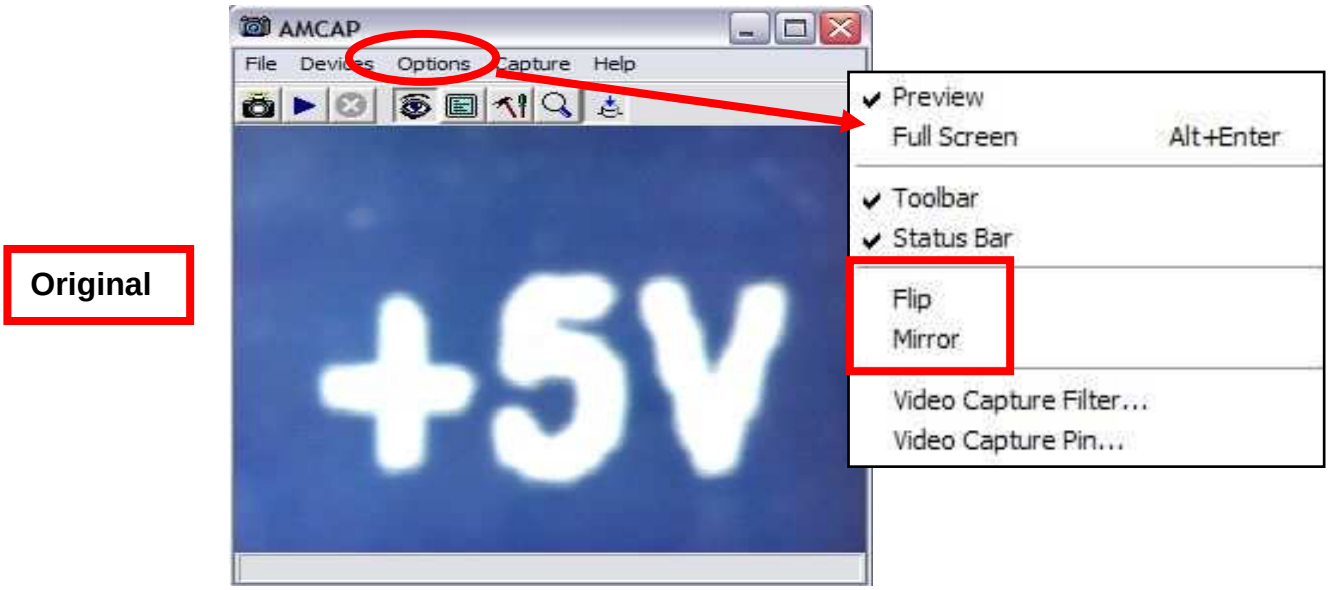
5. Select “Video proc Amp”：can fine tune the parameters of image



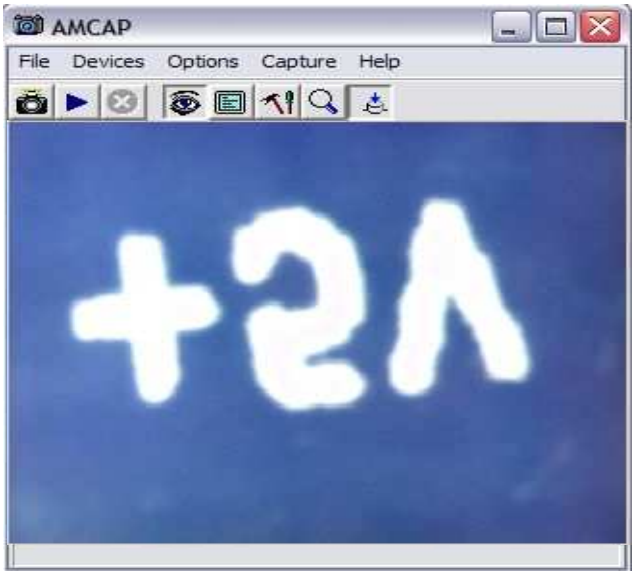
6.Select “Option”——>”Video Capture Filer”, or click icon . The Properties showed below：



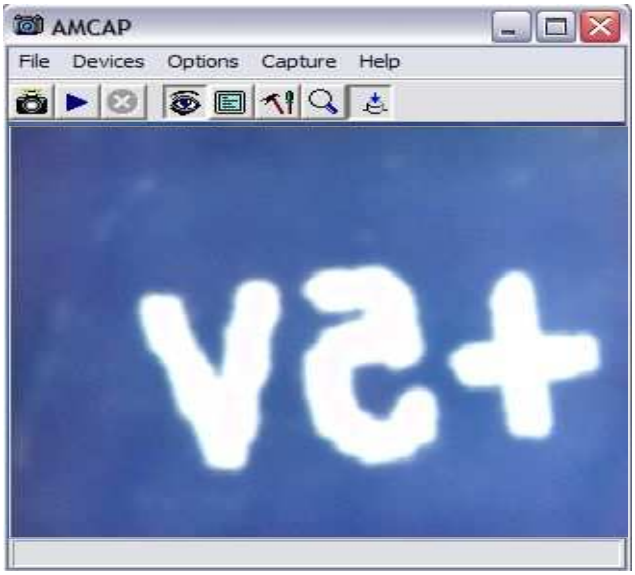
7. Select “Options”—>“Flip”/”Mirror”



Original

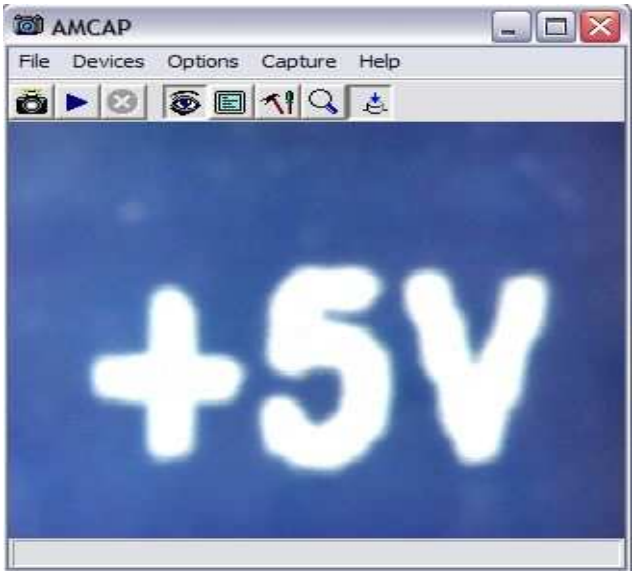


Flip

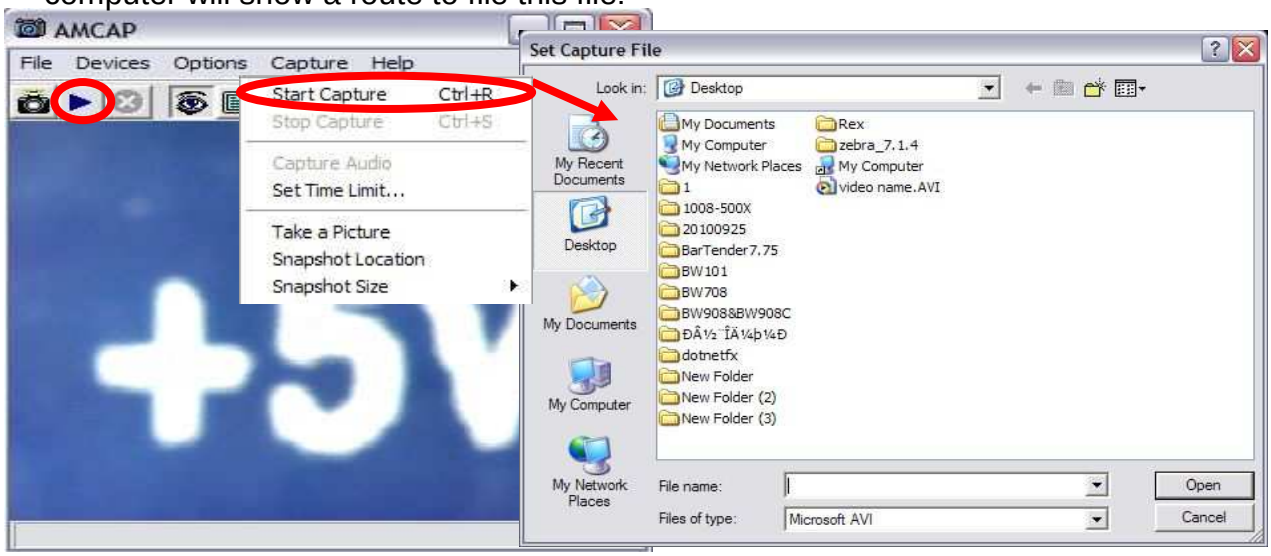


Mirror

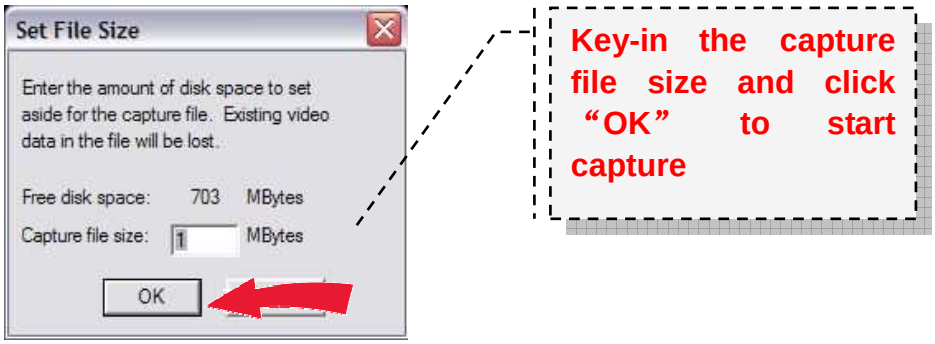
Flip + Mirror



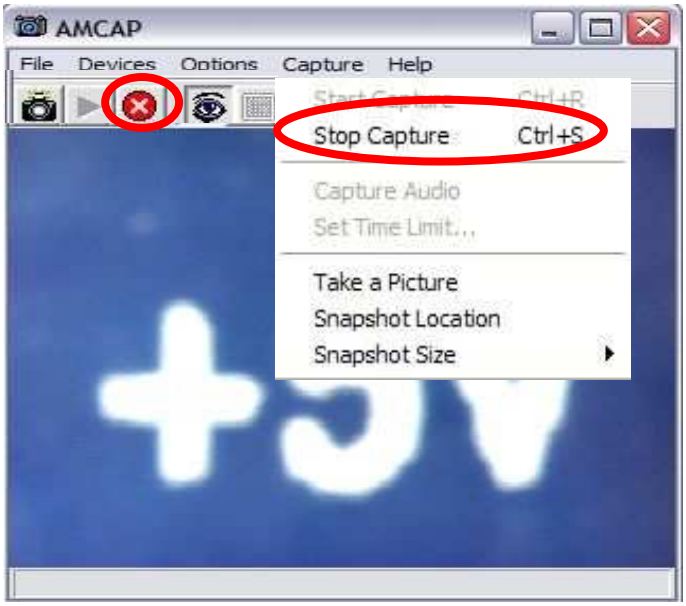
8. Select “Capture”—>“Start Capture”, or click icon to start capure，computer will show a route to file this file:



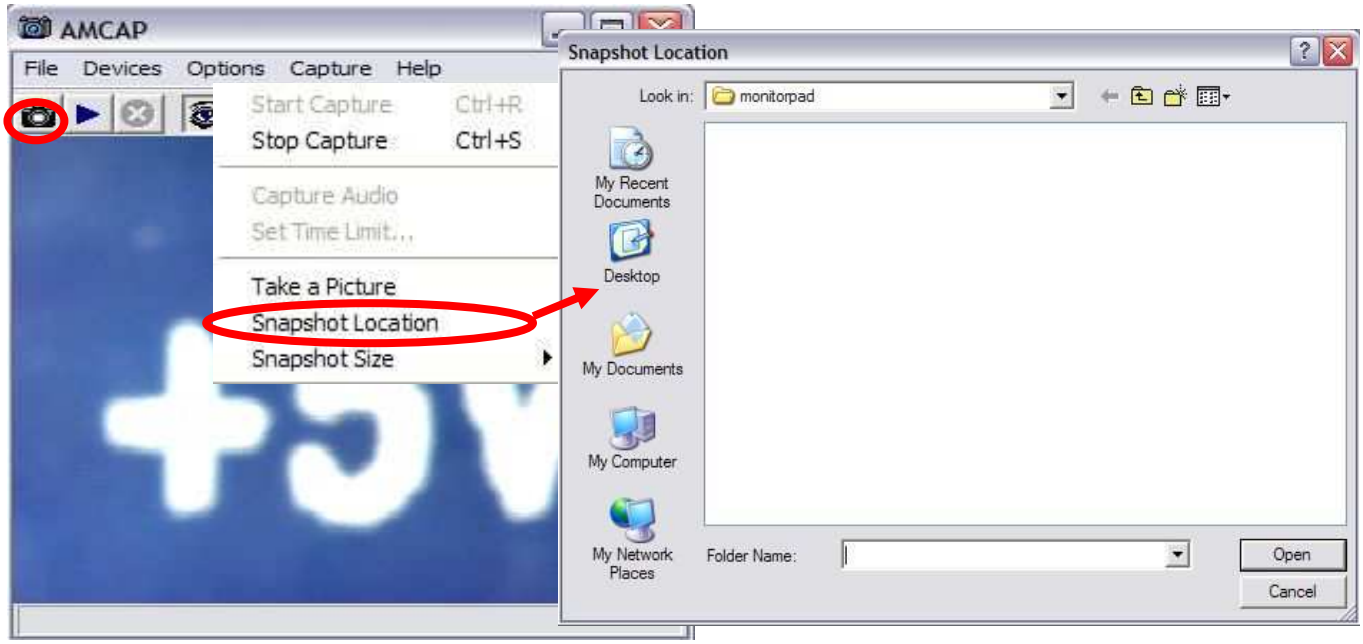
Set file size, the file size could be assign as below:


Set File Size
Enter the amount of disk space to set aside for the capture file. Existing video data in the file will be lost.
Free disk space: 703 MBytes
Capture file size: 1 MBytes
OK
Key-in the capture file size and click “OK” to start capture

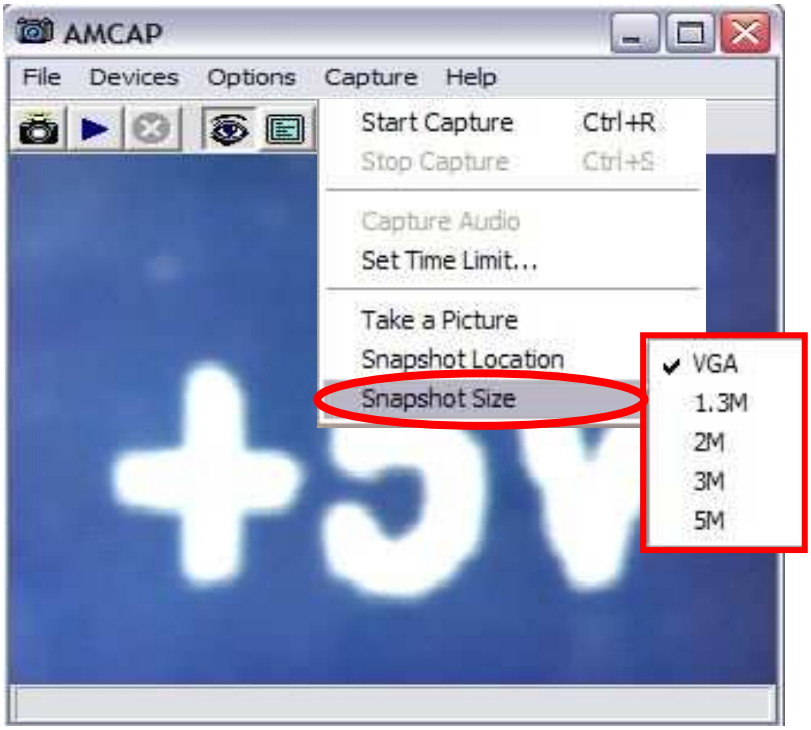
How to stop recording : Find “Capture”—>“Stop Capture”, or click icon to stop capture.



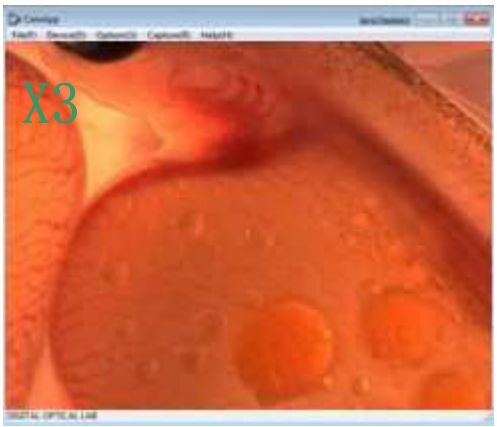
9. Select “Capture”—>“Tack a Picture”, or press bottom ”SNAP” or click icon to take a photo . Select “Capture”—>“Snapshot Location” to assign the file route as below：



10. Select “Capture”—> “Snapshot size” to change images size:



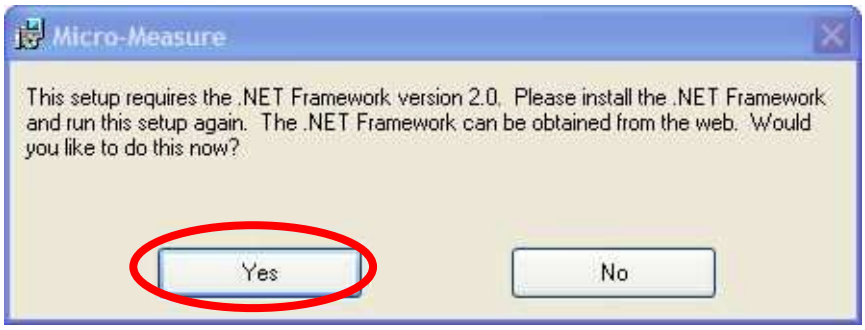
11. We provide digital zoom function : Please press zoom by sequence to make X1 to X4 zoom effect.**(Note:X1 zoom effect is the Original effect)**



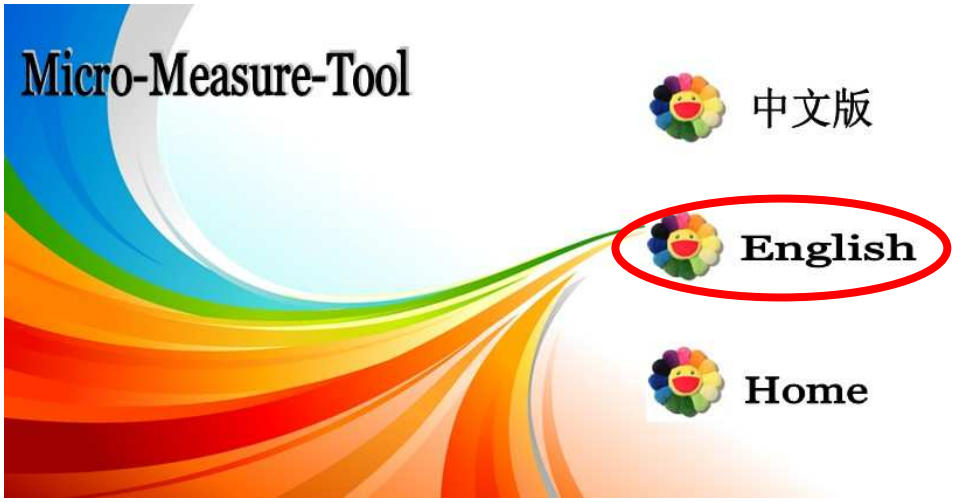
How to install software

1. Insert CD ROM, system will auto come out the interface as bellowing, Click “Micro-Measure-Tool” to start Micro-Measurement Tool program.

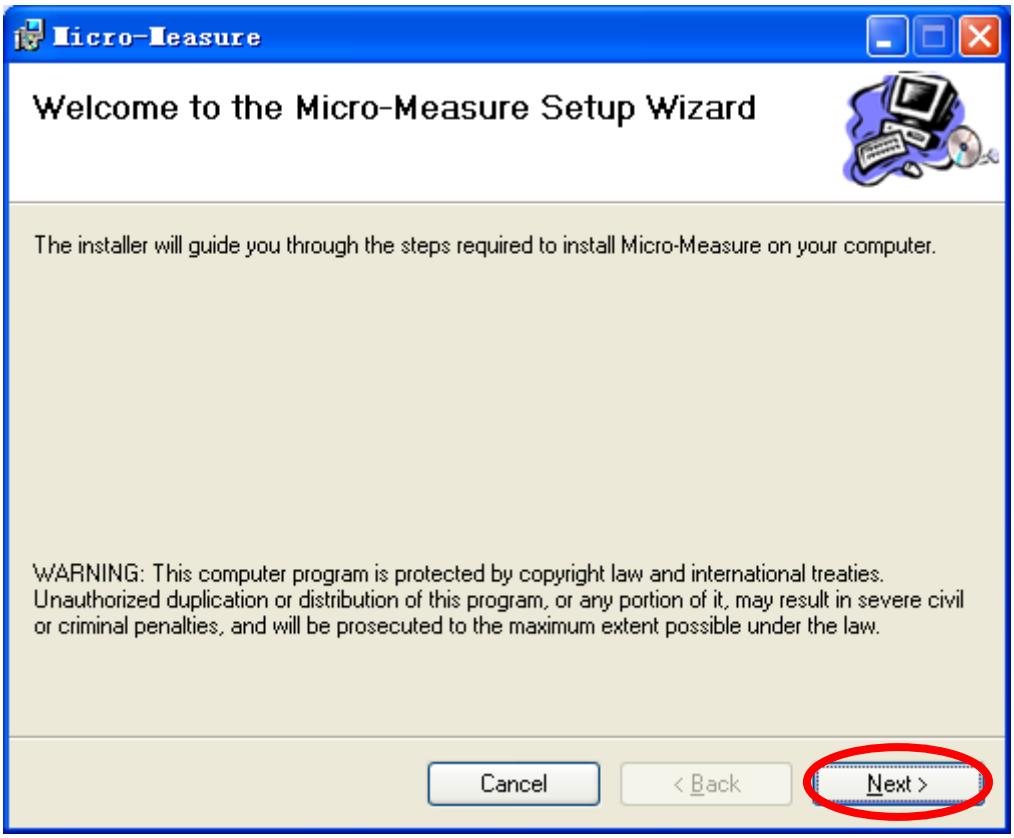
It appears as below if your system asked for Framework version 2.0 before install this software.

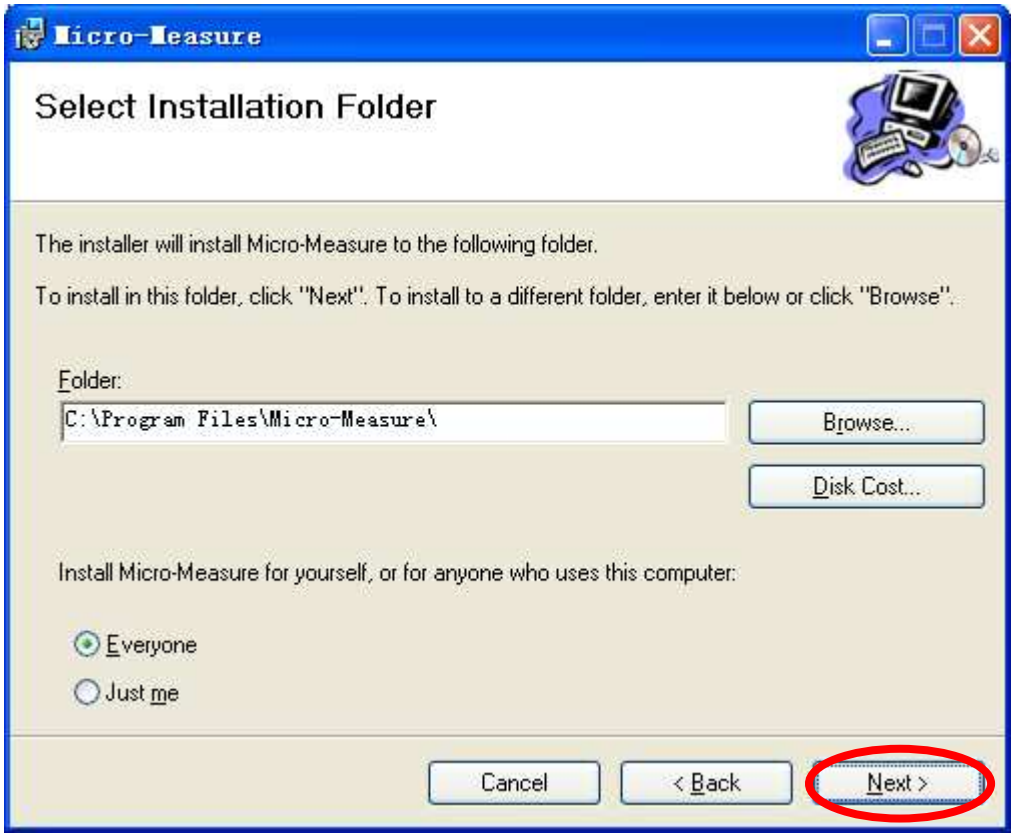

Micro-Measure
This setup requires the .NET Framework version 2.0. Please install the .NET Framework and run this setup again. The .NET Framework can be obtained from the web. Would you like to do this now?
Yes
No

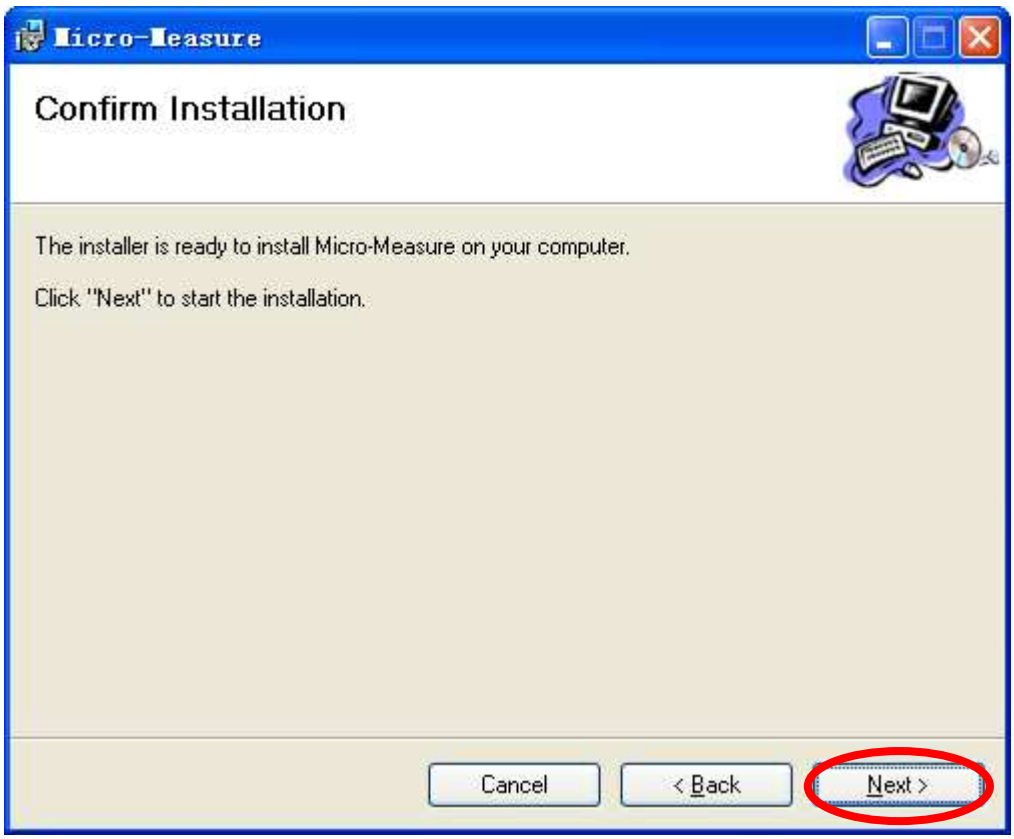
2.Complete Framework 2.0，then click “Micro-Measure-Tool” and start the install process，Interface shows language Selection : please click “English” or “中文版” for Chinese

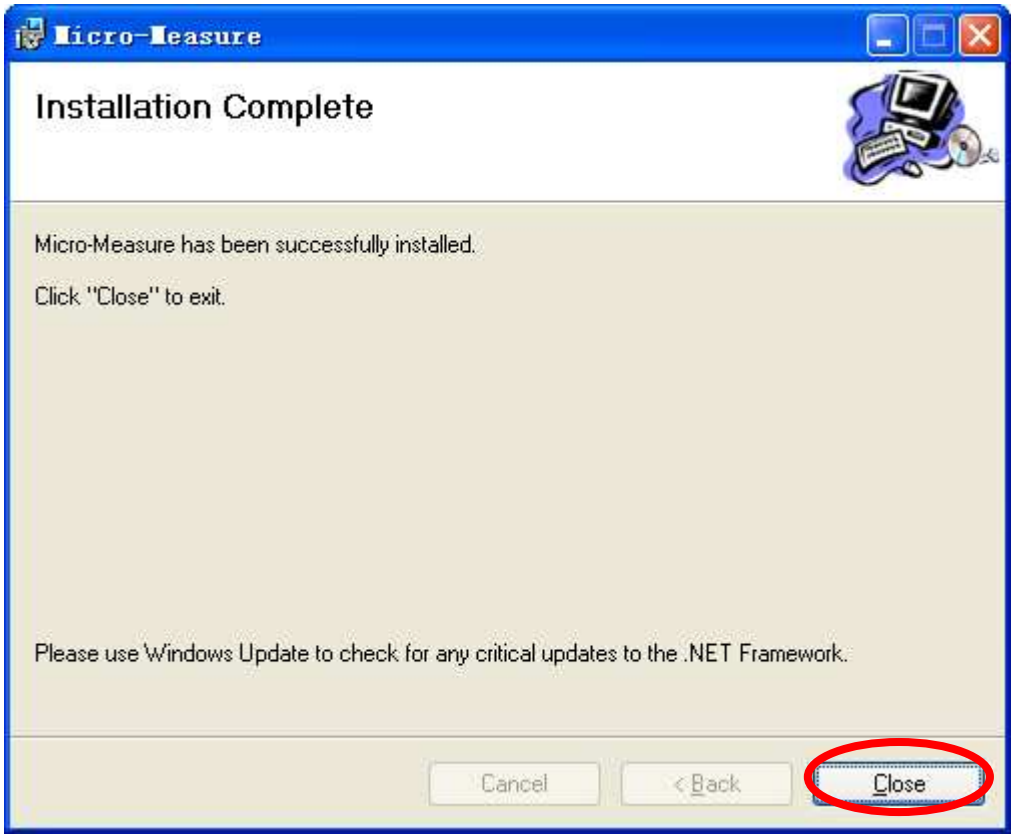


3. Follow the instructions of computer by press “next”, then complete the install process.


Micro-Measure
Welcome to the Micro-Measure Setup Wizard
The installer will guide you through the steps required to install Micro-Measure on your computer.
WARNING: This computer program is protected by copyright law and international treaties. Unauthorized duplication or distribution of this program, or any portion of it, may result in severe civil or criminal penalties, and will be prosecuted to the maximum extent possible under the law.
Cancel
< Back
Next >


Micro-Measure
Select Installation Folder
The installer will install Micro-Measure to the following folder.
To install in this folder, click "Next". To install to a different folder, enter it below or click "Browse".
Folder:
C:\Program Files\Micro-Measure\
Browse...
Disk Cost...
Install Micro-Measure for yourself, or for anyone who uses this computer:
Everyone
Just me
Cancel
< Back
Next >


Micro-Measure
Confirm Installation
The installer is ready to install Micro-Measure on your computer.
Click "Next" to start the installation.
Cancel
< Back
Next >


Micro-Measure
Installation Complete
Micro-Measure has been successfully installed.
Click "Close" to exit.
Please use Windows Update to check for any critical updates to the .NET Framework.
Cancel
< Back
Close

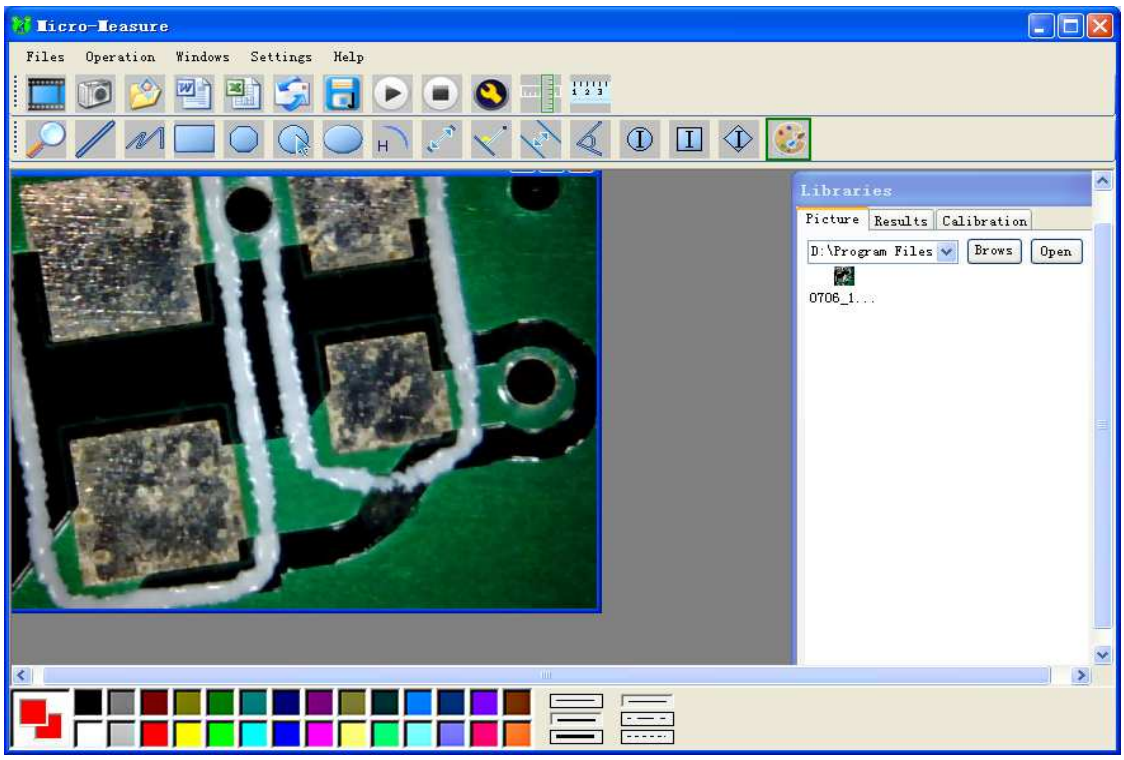
How to do micro-measure

1. Make sure driver has well installed, double click icon

on desk top of computer.

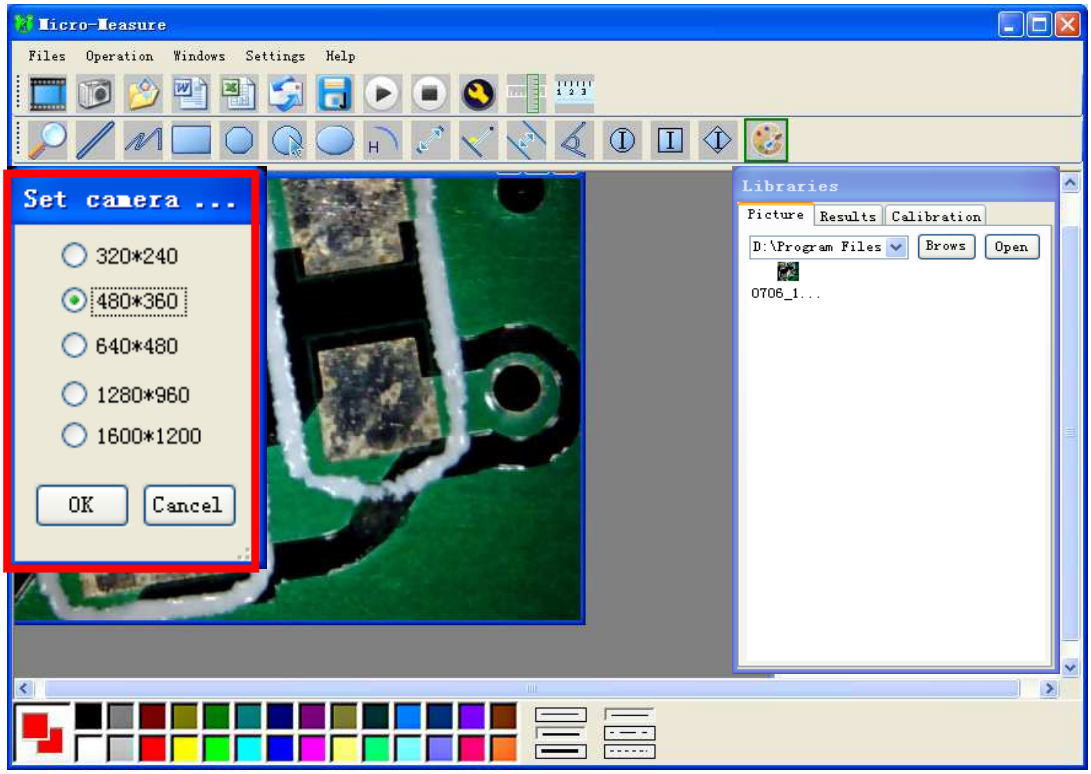
2. If microscope did not in its ready condition (link to PC & ready for use) ,System will remind you to get ready before use (as below shown):

3. Plug – in Microscope, real time display in operation window ：

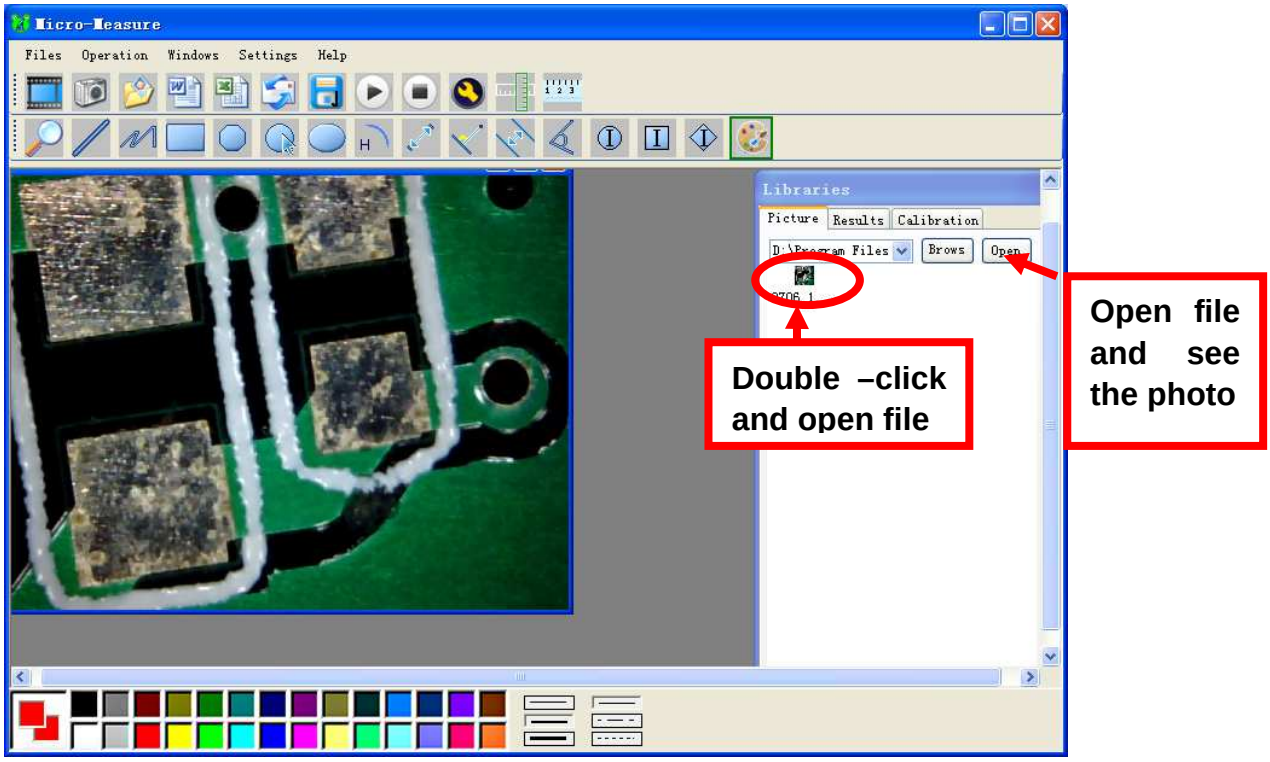


4. The instructions of function options ：

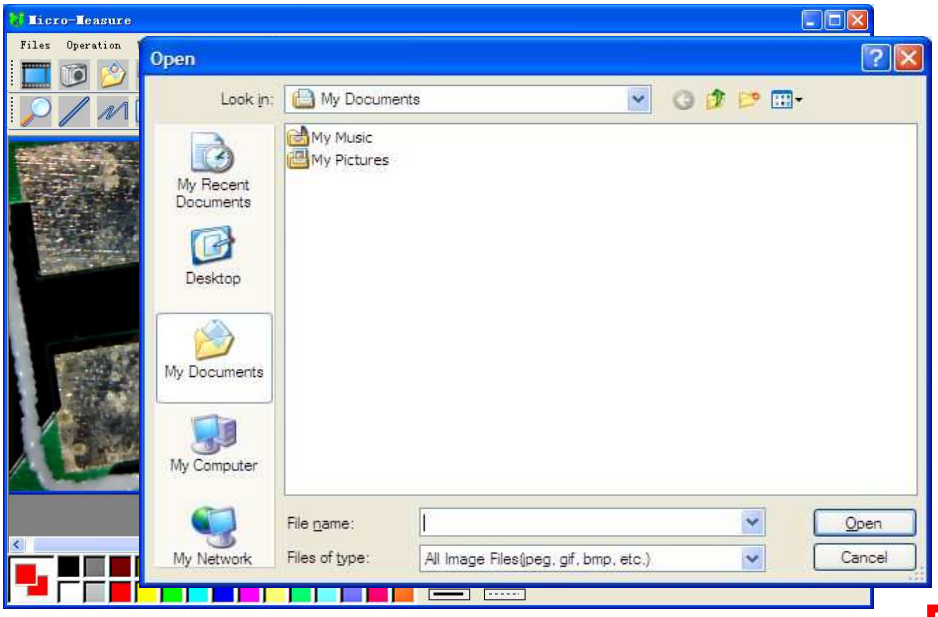
Click ,open operation system, Choose image resolution from CIF ~ 2M, depend on image quality need. (Default at VGA mode 640 x 480)



Click SNAP icon to take pictures as below shown



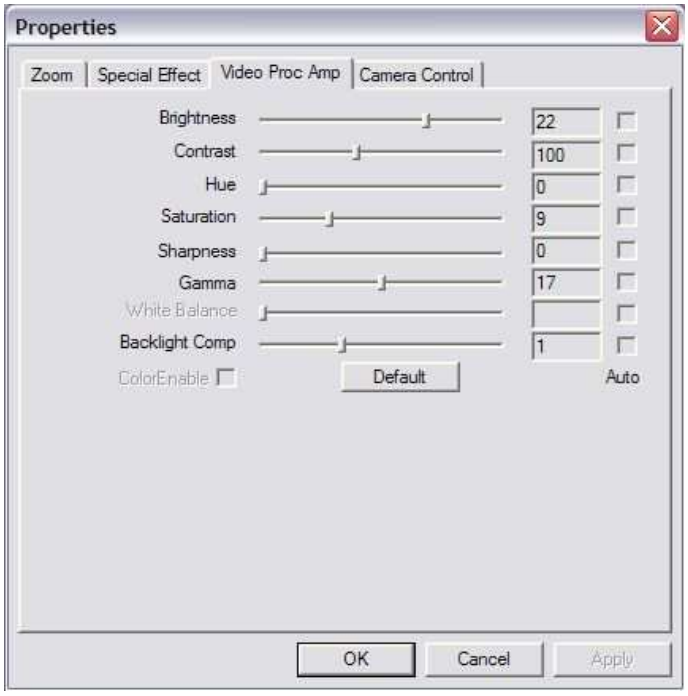
Click icon to open pictures，and click icon to save pictures



Video function: from left to right : Play (Pause) ,Stop .

Click the preview function stop, system show and start measure.

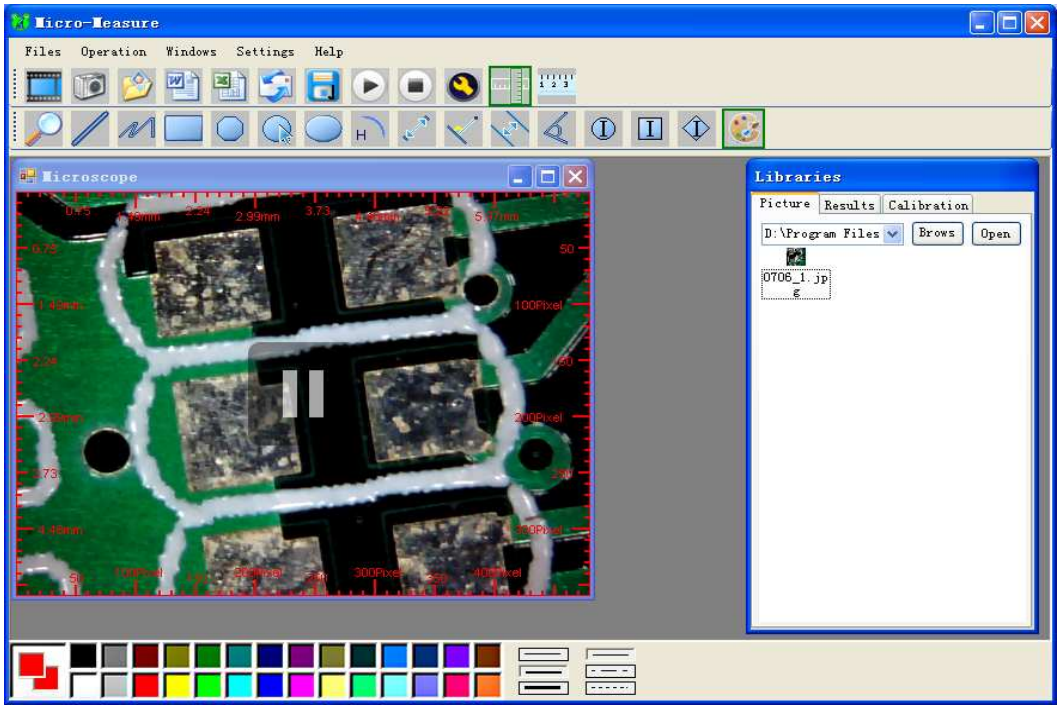
image fine tune parameters , include Zoom ,Video Proc Amp & Special Effects.



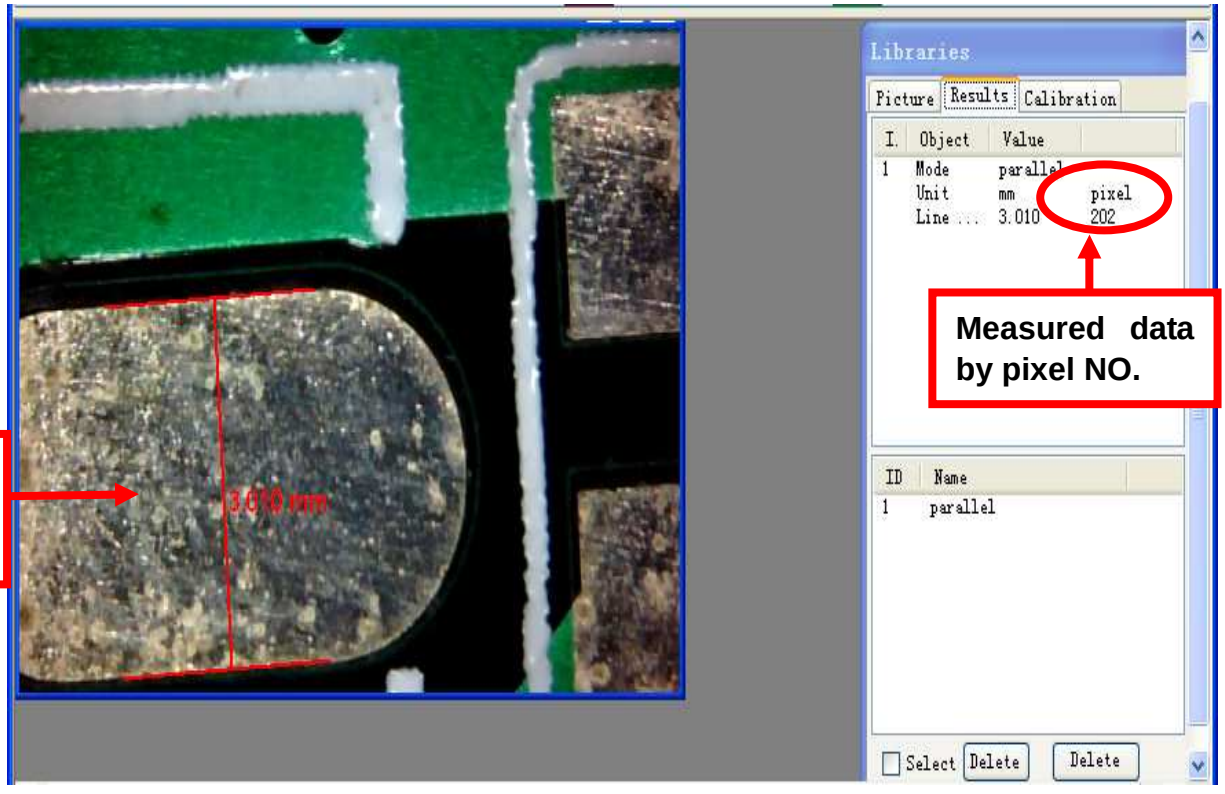
Magnifier

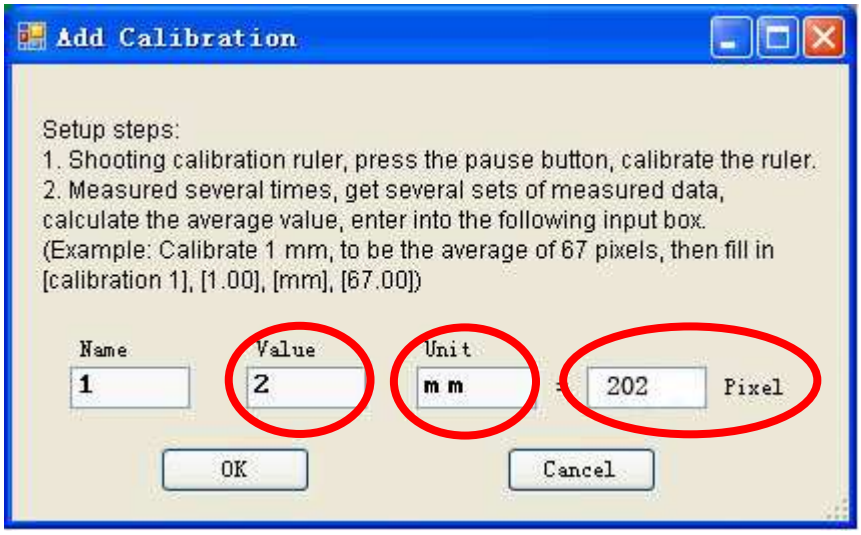
Calibration functions.

① Click ，Show as below



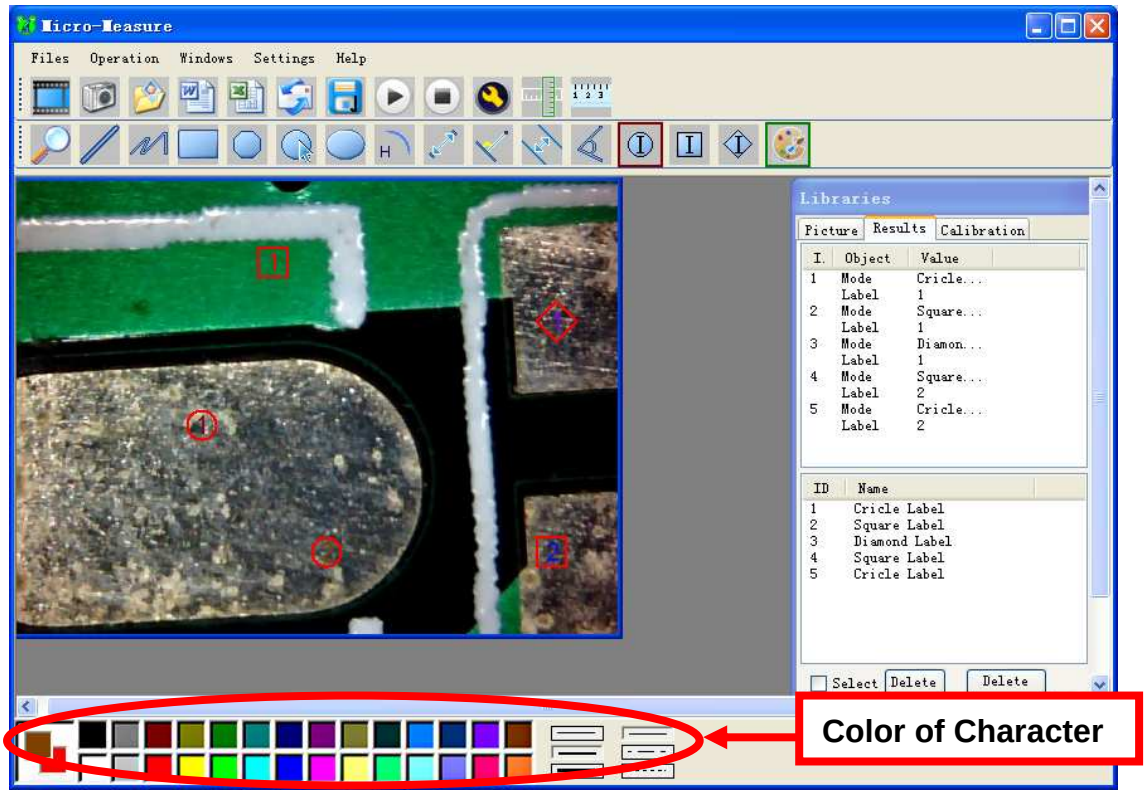
② Click , start calibration make sure certain accuracy.





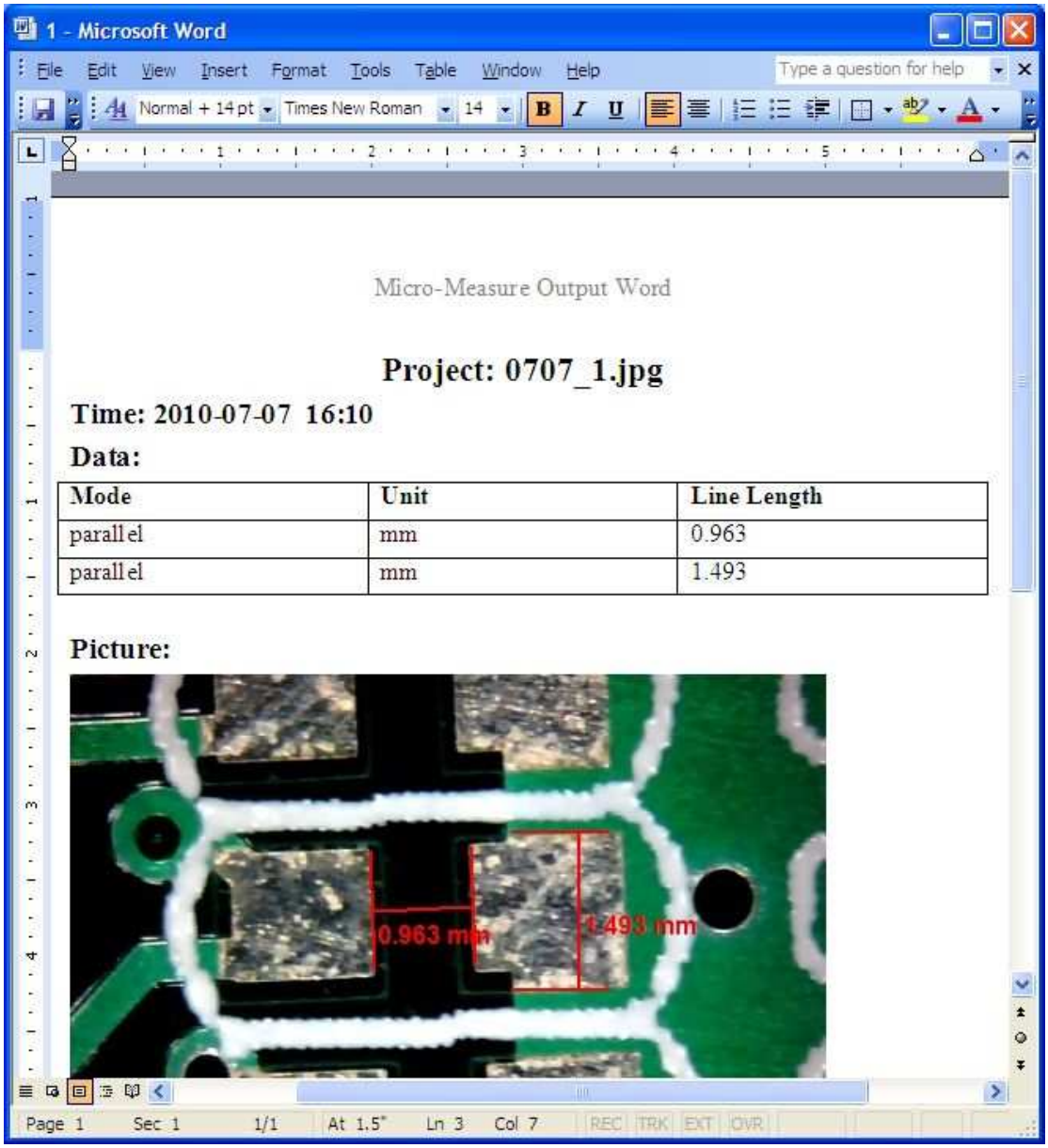
Key-in measure data，unit (mm) and pixel no. then click “OK”.

Color setting of display character



Click to file by WORD format or EXCEL format, you can direct e-mail out by Outlook.

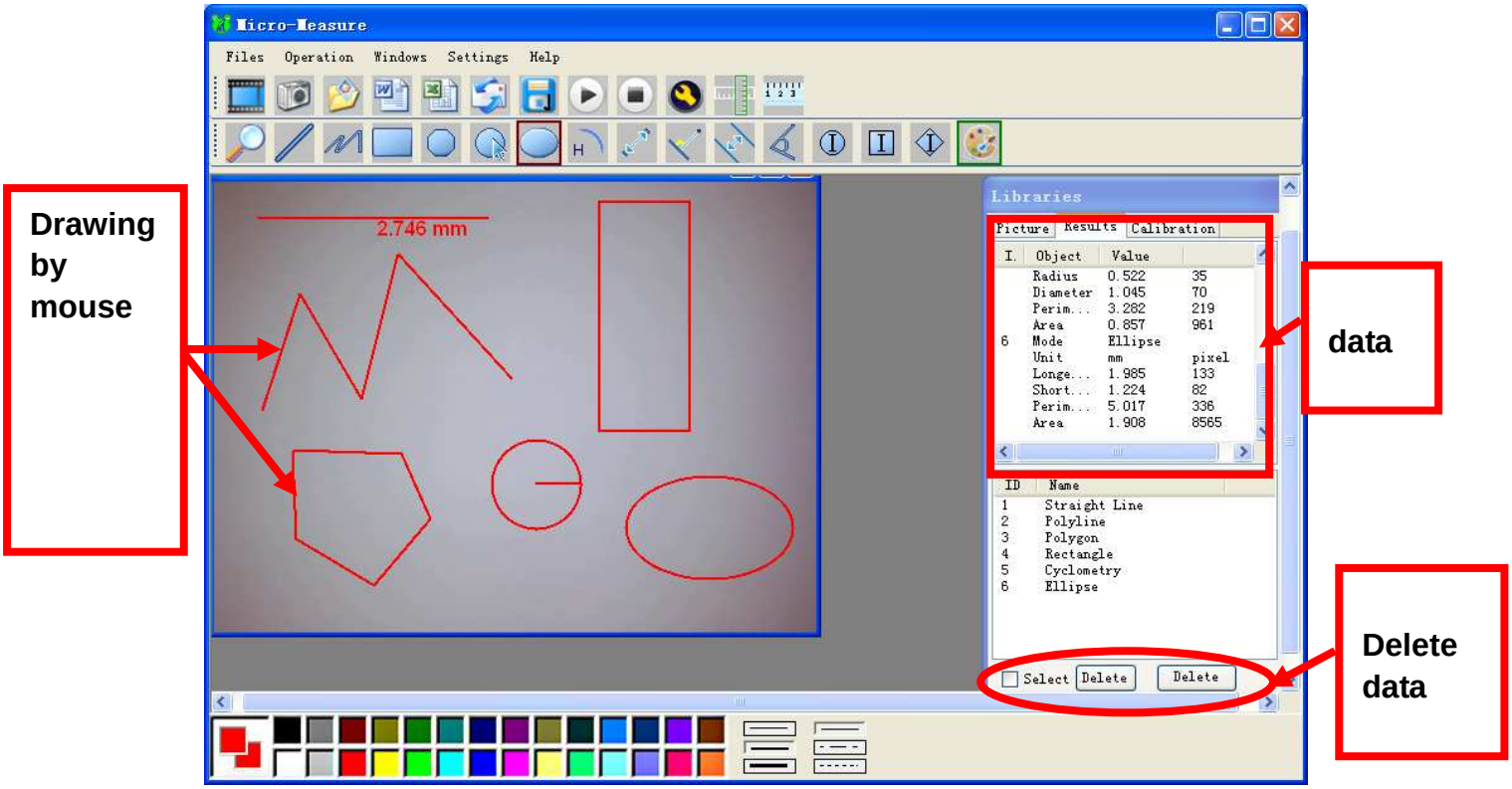
Example : Measure data under Word file.



measure functions：

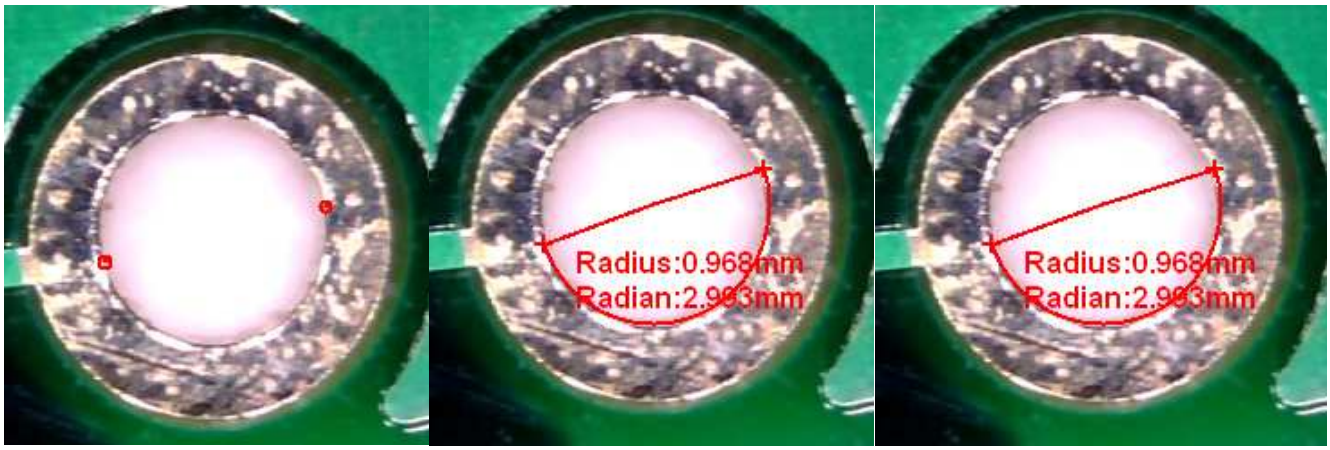
From left to right : Length , Set-Line Length.

Square, polygon, ring , oval.（as below shown）



Arc measurement : include : Arc length , diameter.

Fix the start point & end point on the arc, then fit in the curve by fine tune (Through mouse) curve.（as below shown）



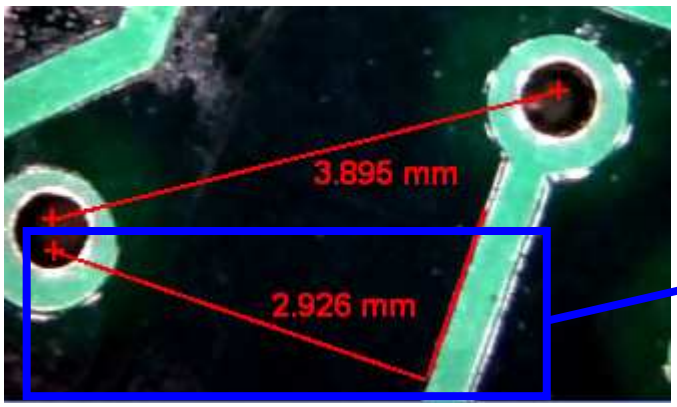
Select 2 points in the Arc

Fit in Curve by moving your mouse.

Complete measurement by click left key

Left : Point to point distance , Right : Point to line distance.

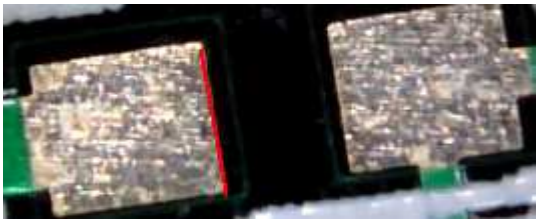
Tips: start :keep press the mouse right key and ended by lease key.



Notes ：When measure line to point , be sure to fix line first or it cause fail.

Left : Measure the distance between parallel lines . Right : angle of two lines.

Tips : Find a base line by mouse and move to another line by moving mouse. Measure results will show on screen.（as below shown）

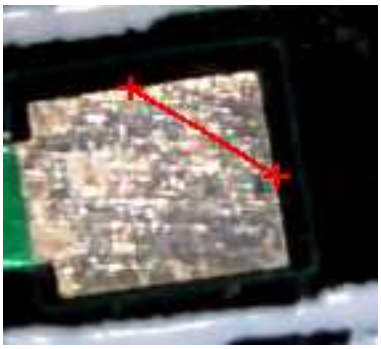


Select 2 points on

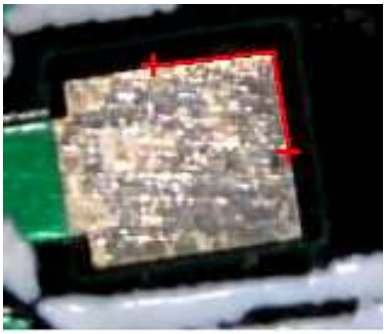
Try to match

Distance found

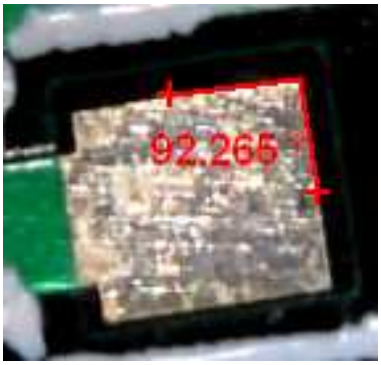
Tips : Find 2 points at right & left side of the angle top, then click the top of angle. Measure result wills display.（as below shown）



2 points selected



Moving to the top of angle



Confirmed & click

Q & A

Q Why pre-view disable?
A 1 No driver installed.
2 LED did not on (Lighting)；
3 Re-boot Camera。

Q Ill measure accuracy?
A 1 Re-calibration
2 Fine-tune focus

Q How to un-install software?
A Depart the micro-measure camera from PC.
1 Find the program file in system，click “un-install”。
2[Start]>[Program]>[Digital Microscope]>[Uninstall]
[Start]>[Program]>[Micro-Measure]>[Uninstall]

Q Micro-measure Software un-work?
A 1 Check the connection is workable .
2 Check the software and re-start the program.